Michigan's Public Safety Communications Interoperability Board

Meeting Agenda 6/12/24 at 2:00pm

MSP HQ - 1917 Room

1. **Call to Order & Board Member Roll Call**

2. **Approval of Previous Meeting Minutes - March 13th, 2024 meeting**

3. **Additions & Approval of Meeting Agenda**

4. **Communications & Correspondence**

5. **1st Public Comment - Open to public comment (limited to 3 Minutes per person)**

6. **Old Business**
   a. FBI & MSP CJIS Requirements (LEIN Information via LMR) Discussion
      i. Future meeting to be scheduled with members from the MPSCIB, Encryption WG, and MSP CJIC to work on this issue.

7. **New Business**
   a. Request for new MPSCS Radio Coverage Work Group under the MPSCIB.
      i. See attached correspondence from MPSCS Manager Greg Farrer and Fire Paging WG.

8. **Federal Updates**
   a. CISA Emergency Communications Division – Jim Jarvis, CISA
   b. FEMA Region 5 RECCWG - Karl Arriola

9. **Statewide Updates**
   a. Statewide Interoperability Coordinator (SWIC) – Brad Stoddard
   b. MPSCS System / Budget / Staffing
   c. Agency/County/Member Additions to MPSCS
   d. Current MPSCS Snapshot Data

Agencies = 2,239
Radios = 148,209
Dispatch Centers = 127
Dispatch Consoles = 757
Computer Aided Dispatch (CAD) consoles = 62
Fire Pagers = 9,486

10. 911 in Michigan

a. Joni Harvey, State 911 Director

11. Workgroup Reports

a. ***Communications Unit Workgroup*** - Co-chairs: Ray Hasil & Nick Carpenter
b. ***AUXCOMM Workgroup*** - Co-chairs: Jaclyn Barcroft & Max Schneider
c. ***Public Alerting Workgroup*** - Co-chairs: Jaclyn Barcroft & Rob Dale
d. ***Fire Paging Workgroup*** - Co-chairs: Al Mellon & Greg Janik
e. ***Encryption Workgroup*** - Co-chairs: Tim Jones & Matt Groesser
f. ***Security Workgroup*** - Co-chairs: Capt. Kevin Sweeney & Brad Stoddard
g. ***UASI Workgroup*** - Co-chairs: Craig Swenson & Sean McCarthy

12. 2nd Public Comment - Open to public comment (limited to 3 Minutes per person)

13. Good of the Order - Announcements/Comments by Board Members

14. Adjournment

Michigan's Public Safety Communications Interoperability Board

3/13/24 Meeting Minutes

MSP HQ - 1917 Room

1. **Chair Bryce Tracy called the meeting to order at 2:00pm. Roll call was taken and is noted below.**

Board Member	Present, Absent or Virtual
Ms. Brianna Briggs	Virtual – Derek Flory
Mr. Gary Hagler	Present
Mr. Thomas LaFave	Absent
Mr. Sean McCarthy	Present
Chief Edwin Miller	Absent
Mr. Matthw Sahr	Absent
Fire Marshal Kevin Sehlmeyer	Absent
Colonel Raymond Stemitz	Present
Mr. Brad Stoddard	Present
Captain Kevin Sweeney	Present -Inspector Michelle Sosinski
Mr. Art Thompson	Virtual
Mr. Bryce Tracy	Present
Chief Jon Unruh	Present
Chief Edward Viverette	Present

Also in Attendance:

Kate Jannereth	Jim Jarvis	Danielle Stewart	Greg Farrer
Kathryn Hall	Joni Harvey	Tom Proffitt	Tarek Sasy
Anastasia Ferguson Nelligan	Dennis Fitzpatrick	Korey Rowe	Matt Groesser
Chris Kuhl	Greg Janik	Bryce Alfod	Rob Dale
Max Schnieder	Tim Lee	Kevin Collins	Karl Arriola
Virtual Attendees:	Ray Hasil	Al Mellon	Rob Dale

Pritam Iyer Karl Arriola Dennis Fitzpatrick Nick Carpenter

2. Approval of Meeting Minutes from December 13, 2023 Meeting.

A Motion was made by Mr. Sean McCarthy, seconded by Mr. Gary Hagler and carried to approve the December 13th Meeting Minutes.

3. Approval of Meeting Agenda

A Motion was made by Mr. Brad Stoddard, seconded by Chief Jon Unruh and carried to approve the March 13, 2024 Meeting Agenda as presented.

4. Communications and Correspondence: None

5. 1st Public Comment: None

6. Old Business:

a. Communications Ecosystem Briefings

i. Follow-up on Letter of support from MPSIB regarding USFS Waiver Fees

Brad Stoddard reported about the request from the AUXCOMM Workgroup to provide a letter of support for mitigating fees for their equipment for United States Forestry Service (USFS). He said it took a little time to get it through DTMB management and the Governor's office. It has been sent out to Senator Stabenow's office now. Max added that Ed Hude did receive a copy of the letter, so it went out as Brad has stated.

7. New Business

a. FBI & MSP CJIS Requirements (LEIN Information via LMR) Discussion

i. Bryce Tracy asked everyone to pay attention to the next speaker as best as you can, it's a complex topic. Mr. Kevin Collins will be speaking on behalf of CTIT. Mr. Collins said that he is a 20 plus year employee with MSP, and all with LEIN starting as an auditor and overseeing lead field services. IT Security is also his area. He is here to pull the veil off of radio encryption. Is it required, is it not? Even the FBI didn't want to talk about radio encryption being required. We were surprised with our audit by the FBI. They said that any criminal justice information needs to be secured at 140-2 which is 128bit encryption. There are

2 minor exceptions. 1) voice over cellular 2) microwave point to point line of sight. Getting surprised by that this summer I understand that it spread fast in the community. The other part of that, that goes along with the encryption discussion, is dissemination to authorized agencies. LEIN criminal justice information in general is required to be sent to only authorized agencies. We need to make sure the information is encrypted but only be disseminated to allowed agencies. Their internal audit people tweaked their audits after the FBI audit. We were delinquent in not communicating that, and that it was a requirement. So, if our auditors find agencies out of requirement, they won't take it to a referral, there will be no hounding. We are just requiring a reply that they will comply. That will be all until next cycle which is in three years. It's not an overnight process and it's not cheap. You would think in the last 15 years someone would have talked about it. From his standpoint, encryption & dissemination, how you get there he doesn't care as long as you get to those two points. He met with Brad Stoddard and Bryce Tracy about this to come up with some guidance. Their intention is to get that out to the agencies. Collins asked if there were any questions.

ii. Colonel Raymond Stemitz asked if 128 bits is the standard? Mr. Collins said yes, its 140-2. Stemitz added, what will the equipment impact be? Collins said he is not a radio expert and referred to Bryce/Chris Kuhl. Chris will look that up. Bryce said we know it's not Art480B but the AES 256 is the Feds' standard.

iii. Gary Hagler stated, in terms of dissemination, part of that is eyes on screen, CAD dispatch response, and people in the car. He wonders specifically about overheard voice conversations from people in a patrol car, like cadets, etc. Collins replied, for cadets and interns that are given permission to ride along or work with, they should take security awareness training and sign a non-disclosure agreement. They do not have to be LEIN trained though. For prisoners in a patrol car, those are more difficult. Best answer is to do your best to shield people from that information. If you angle the laptop screen or use a blackout screen those are a good idea.

iv. Brad asked, is there an attempt to get clarification of what they require for encryption? Collins said no, there hasn't been an attempt to ask what is acceptable. That said there has been discussion that maybe 140F2 is not as good. If he knows what the particular encryption is he can ask. We have AES 256 which is part of the Feds. Brad said that we are not the only system in US with statewide LMR, other states would be in the same position. As the representative for the 2000 plus agencies in Michigan, if there is not strong guidance, we can put the matter in our Encryption Workgroup. If anyone has to make investments in that, it's a matter of cost. We want to be sure the workgroup gives them leverage. Bryce said, you mentioned that it's a 3-year cycle and it wasn't defined with the FBI side, but as long as we put a strategy in place. The last thing anyone wants to do is create an unfunded mandate. We

have to work towards a strategy, hopefully their understanding of that and that we are all sharing an expectation. We need to have open lines for communication.

v. Collins said that its fair. He wants to see the 140-2 but the rest is fair. Matt Groesser said, we have been doing a lot of work about transition to whatever compliance would be. For Kent County it's $3.5 million in updates. To Brad's point, it's important to have communication foundation out there early and often from local to federal agencies together. It's going to be really important when government budgets cannot support the costs. Collins said he was glad we have broken the ice on this. We do need to work together and come up with definitive standard and timeline. He will talk with FBI about what is acceptable.

vi. Ray Hasil said that Net Motion has standard data encryption. DES and AES are radio Fips and 140-2 is on data. Chief Viverette said its imperative it be laid out early, but that allows us room to push, and we have a 3 year period to get it out there and push it.

vii. Brad asked, what happens if an agency can't afford the encryption? What happens to that agency? Collins replied that any general violation of some policy, there is a progressive sanctions policy for violations, but the other part is they will keep hounding you for progress. We have to look at other strategies. Brad said he's not sure what we will communicate with users, but we are just a tool for use, based on conversations we've had, we can't mandate encryption. We suggest looping in the FBI, but it's the same problem for every state.

viii. Jim Jarvis said it's a certification standard for a module, but does it perform well in testing? 148 is not the same as 140-2. DES is 56 bit, so triple DES may apply. We look from a standards process and AES 256 is the recommended system. He noticed in the FBI CJIS policy, they have a communication policy, and they have LMR in there. There really aren't details in that. If transmitted outside the boundary, LMR system doesn't fit that. For intrusion detection, someone could tap into your system and listen maybe. There are things in the policy where they forgot LMR. The FBI needs to look at this. He brought this up in CISA a number of times, and he gets the same reply, we don't want to talk about it. With Brad's question, what do we do when agency fails? The roadmap to fix problems is 12 years.

ix. Bryce said that this is a complex topic and he give Collins credit for coming here to talk about it. Frankly, the audits were different for state and local. In his county, none of this was mentioned. So, what he would like to offer is that this Board, asks what other states doing to work on this. He wants to make sure our SWIC is a part of that and to form a workgroup with this Board and the

Encryption Workgroup. He implores the attendees to go to State CJIS and form this group and include the responders in the state that will be impacted. Then come back to our respective authority and boards that are coming up with a plan. If we can somehow do that at a decent pace so when the Feds ask you "what are you doing in Michigan?" we can all be on same page. This can help all of us to create a standard regardless of what system we are on in the future. Does that make sense? Collins said, yes it does. Bryce said that Collins and Brad Stoddard would work with Federal side and Jim Jarvis can help. We need to define what is what and the goal and the financial impacts. We need to take our time and do it right especially at the end-user level. Encryption is not pushing a button and its done. If we do this together, we can meet the expectations of securing. Collins said that made sense.

x. Sean McCarthy said, if we have a plan, we have to have dates. If there is nothing there, his people won't do it. Bryce said we need to take our time on this, come up with a pace to do it before making a strategy. A unified plan strategy will give the feds a goal that we are trying to get to. He thanked Mr. Collins for attending. He said we will reach out to Mr. Collins with that correspondence.

8. Federal Updates

a. CISA Emergency Communications Division – Jim Jarvis, CISA

i. Jim Jarvis said he was going to send an email to the CJIS administration board. The Emerging Communications Division is looking to develop a cyber law enforcement division. In the Communication Tech branch in the command structure, there is radio communications and Brad Stoddard is a member. The other thing is that we have an update to the Public Safety Communications toolkit, it's an active adobe screen and has cityscape and takes you to best practices and one for alert warnings, 911 next generation, etc. It's an interactive tool.

ii. We have funding concerns for Interoperable Communications Technical Assistance program. For rest of the year, CISA will be unable to fulfill requests. Here in Michigan, we have 4 AUXCOMM courses available and a Communications Leader course.

b. FEMA Region 5 RECCWG -Karl Arriola

i. He would like to thank Brad Stoddard for allowing him to present at the NCSWIC Conference. The Wisconsin Hospital Network continue development of the tabletop interoperable exercise occurring Q4 of this year. Thank you to those who helped with final edits of RECWGG report. It will be sent to HQ and then goes to Congress. Actions for FEMA HQ Mt Weather (thank you for Michigan support) led the nation with participation. As for this year 2024 RECCWG plenary

the group voted not to have one this year. In lieu of an in-person plenary they will have a virtual plenary. For the Total Solar Eclipse on April 8, we have high frequency available to augment local agencies. Lastly, for 2025 plans, he did the coordination call with Region 7 and are holding a plenary in Arkansas or other state to be determined. Bryce added that the Republican and Democratic National Conventions are both happening in nearby states so the Interoperable Communications for our neighbors will be intensified. Our AUXCOMM group will be involved.

9. Statewide Updates

a. Statewide Interoperability Coordinator (SWIC) – Brad Stoddard

Brad reported that in February, we held the Statewide Interoperable Communications Conference. We outgrew the space we were in and now we're outgrowing the current space. We had reps from CISA Regional leadership there in a panel. Our counterparts from Indiana came, to learn how we put the conference together. There was a group from Maryland too. We recognize that the content can be a little dry for some, that's always the challenge. If the board has any topics for this conference, let us know. We had a pretty interesting exercise to encourage people to sit with someone you didn't know. We wrote the problem down and had colleagues help with solving it. A number of PSAPs brought a lot of attendees, like Ingham County and others in southeast Michigan. We will make sure next year that it's not at the same time as the 911 Conference in D.C. Overall, the conference was well received. He offered kudos to all the team members that helped from EMHSD and MPSCS. It's not easy and it takes a lot of people and lot of passion. Outside the conference, there were some conversations around technical assistance offerings. It's a bigger impact for other states. At our next meeting, he expects to share some more information. There was a conversation between SWICs and CISA leadership and it was intense. Jim was doing a great job keeping Brad and other SWICs informed.

b. MPSCS System/Budget/Staffing – Kate Jannereth said that back in December 2023 we talked about budget request of $12 million now it's actually $10 million. Staffing of the MPSCS management team is going well. We have only one vacancy. We have 123 out of 137 positions filled.

Brad added that the budget presentation that DTMB has done, when Gov Snyder was in office, it was a statewide lifecycle, it was the first time we replaced equipment. He drew the parallel of MDOT and us. In the last budget it was referenced as critical infrastructure. Since then, at the Senate hearing, there were questions related to the dollar amount of $10 million. But the one question that came up was from Senator Albert. He asked, who all needs towers? He shared that he had asked for this information but didn't get an answer. However, this was the first time we heard it. Our team is working on this information. Parallel also was on radios how many are 10 or 15

years older. We've seen a number of legislators requested tours of MPSCS. He thinks that is a positive. There is an awareness of what the system is. This has well surpassed a billion-dollar network. The last session at the Statewide Interoperable Communications Conference, was about the MSU active shooter and they touted how well their communications worked. That goes to show the success of interoperability. It was a real-life event that brought all kinds of people here. Hopefully all these things culminate to success but still lot of runaway until we find out about our budget. We proposed more than DTMB approved and it's only a 5-year plan and not long term. For example, the towers were 50-year towers, but the concrete wasn't. When we start looking at regular investments, it starts to add up.

c. Agency/County/Member Additions to MPSCS Kate reported that Barry County should go live Fall 2024 and we are replacing our first tower ever in Nashville.

i. **Critical Connect:** Brad said they changed some internal processing like the onboarding piece between Motorola and the carriers. This was originally to connect Indiana and Michigan systems together. At the same time, the resiliency of LMR was written by an FCC official. It touted that LMR isn't going anywhere. Bryce said I'm sure there is security concerns with that. Brad: yes, and the technology is still evolving in that.

d. Current MPSCS Snapshot Data

i. Agencies = 2,230
ii. Radios = 146,963
iii. Dispatch Centers = 126
iv. Dispatch Consoles = 741
v. Computer Aided Dispatch (CAD) consoles = 62
vi. Fire Pagers = 9,486

10. 911 in Michigan

a. Joni Harvey reviewed her report submitted to the board ahead of time. She added the following information. They are working with OHSP office regarding the grants they get every year. We want to see if 911 can have access to that. She has been doing education on it. Connecting the dots on locations information, equipment, and protocols they use and how that connects. Conversation has been going well. She has also been working in Federal 911 office in the department of NHTSA. Also, we have been working the last couple years, trying to get 911 in high schools so students can get certification. Tim Jones in Genesee County is doing an entire program in the schools. Bryce added that there is a Technology Forum. If you have questions contact the State 911 office in Lansing.

11. Workgroup Reports

a. ***Communications Unit Workgroup*** - Co-chairs Ray Hasil and Nick Carpenter. Ray Hasil reviewed his report as submitted to the board ahead of time and added the following. He wants to send kudos to Jerry Becker; he does a fantastic job. He said the workgroup wanted to request a COMT course but there is a hold by CISA on all course requests that require outside instructors. Jim Jarvis added he did a review of requests and Michigan has the most requests for training.

b. ***AUXCOMM Workgroup*** - Co-chairs Max Schneider and Jaclyn Barcroft. Max Schneider reviewed his report as submitted to the board ahead of time. He added that there will be training in Escanaba on April 13-14.

c. ***Public Alerting Workgroup*** - Co-chairs Jaclyn Barcroft and Rob Dale. Rob Dale reviewed their report submitted ahead of time to the board.

d. ***Fire Paging Workgroup*** - Co-chairs: Al Mellon & Greg Janik – Chief Janik reviewed the report submitted to the board ahead of time. He added that he networks with Greg Farrer, Chris Kuhl, and Al Mellon and they have 241 systems.

e. ***Encryption Workgroup*** - Co-chairs: Tim Jones & Matt Groesser - Chris Kuhl reviewed the report submitted to the board ahead of time. He added that the workgroup has new members from Manistee. He will be attending the Region 21 Frequency Advisory Committee on March 14.

f. ***Security Workgroup*** - Co-chairs: Capt. Kevin Sweeney & Brad Stoddard -Brad Stoddard reviewed their report submitted to the board ahead of time.

g. ***UASI Workgroup*** - Co-chairs: Craig Swenson & Sean McCarthy. Craig Swenson said that Jim Jarvis already covered what he would have said. He added that the workgroup is spending time on the biggest upcoming concern for MPSCS. Getting procedures in place for users of the system is important.

12. 2nd Public Comment:

a. Craig Swenson said that he is still a little confused about the new encryption information. He doesn't understand what information we are trying to protect. Is it nuclear codes? He thinks it's stupid that all radios in the country will be encrypted. It's just ridiculous. He thinks the Board should push back. If this was just about inefficiency of government, there are few problems he couldn't solve. But it isn't, it's about first responders going into schools for active shooters. Did we forget 9/11 and interoperability? It's about communication. Bryce thanked him for his comments and

said he will always protect and promote interoperability. Its why this Board is here. The only thing we can do to push back is to stand united with this. We are making progress, and we all have to have patience and listening skills to make that step. This is what 9/11 brought to the forefront. We have to stand together as a state. We have not made decisions or put out a mandate, we will be a part of that progress. If anyone has further comments, please reach out to him or another Board member.

b. A member of the public added, he agrees with Craig Swenson. He understands the need for this, but at the end of the day it requires money. There is no quick fix. One thing remains, is that radios get old and need to be replaced. A lot of municipalities are struggled to just buy radios. The goal should be when replacing radios then update the encryption. This is a solution to achieve this goal, it happens when you replace a radio. Interoperability is the main thing. He thinks everyone needs to hear each other. If we do this, we have to do one goal for all: replacement then integration.

13. **Good of the Order** -Bryce said that we need to keep our listening ear open and our minds open. We take the time to understand and then we move forward. He thanked the board and public for attending the meeting.

Adjournment: The meeting adjourned at 3:55pm.

STATE OF MICHIGAN
MICHIGAN PUBLIC SAFETY COMMUNICATIONS INTEROPERABILITY BOARD
LANSING

Fire Paging WG Action Item for MPSCIB Approval at June 12, 2024 Meeting

Recommendation

We are recommending that a MPSCS Radio Coverage Workgroup be commissioned under the Michigan Public Safety Communications Interoperability Board. This workgroup will discuss and develop best practices around BDA installations within the state of Michigan including Code Official inspections, Licensee Consent, and Acceptance Testing. The workgroup will also develop whitepapers to communicate these best practices along with any legal or regulatory requirements around in building coverage and BDA installation.

Background

Bi-Directional Amplifiers (BDAs), also known as Signal Boosters or Emergency Responder Communication Enhancement Systems (ERCES), are devices used to repeat radio system frequencies into areas where the radio system does not provide coverage within its coverage area, typically inside buildings, basements, and tunnels. These devices are necessary to provide reliable communications for first responders. However, these devices, when improperly installed or when malfunctioning, can cause interruptions to emergency communications through interference. This also results in time spent by radio system operators investigating coverage and interference complaints to look for and resolve BDA interference. More recent editions of the fire code, IFC 510 and NFPA 1225, also place responsibility on the fire code officials to ensure that buildings have adequate coverage from their emergency communications systems. This means knowing where BDAs are installed and making sure they are properly maintained by the building owners. As BDAs impact radio system operators and fire services directly and indirectly impact all first responders, we are recommending that a BDA Workgroup be commissioned under the Michigan Public Safety Communications Interoperability Board.

Bryce and Brad,

Bi-Directional Amplifiers (BDAs), also known as Signal Boosters or Emergency Responder Communication Enhancement Systems (ERCES), are devices used to repeat radio system frequencies into areas where the radio system does not provide coverage within its coverage area, typically inside buildings, basements, and tunnels. These devices are necessary to provide reliable communications for first responders. However, these devices, when improperly installed or when malfunctioning, can cause interruptions to emergency communications through interference. This also results in time spent by radio system operators investigating coverage and interference complaints to look for and resolve BDA interference. More recent editions of the fire code, IFC 510 and NFPA 1225, also place responsibility on the fire code officials to ensure that buildings have adequate coverage from their emergency communications systems. This means knowing where BDAs are installed and making sure they are properly maintained by the building owners. As BDAs impact radio system operators and fire services directly and indirectly impact all first responders, I am recommending that a BDA Workgroup be commissioned under the Michigan Public Safety Communications Interoperability Board. This workgroup will discuss and develop best practices around BDA installations within the state of Michigan including Code Official inspections, Licensee Consent, and Acceptance Testing. The workgroup will also develop whitepapers to communicate these best practices along with any legal or regulatory requirements around in building coverage and BDA installation.

Please let me know if you have any questions or need any clarification on this recommendation.

Thank you,

Gregory Farrer

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MPSCIB 911 Administrator's Report
June 12, 2024

- MISNAP: We have worked with the vendor to create a Statement of Work to begin the next round of enhancements. We are hoping for these to go-live by early December.

- New Positions within the State 911 Office
    - Cindy Homant, 911 Technology Specialist
    - Lyndsay Keith, 911 Designation Specialist
    - Posting closed on 6/4 for the Compliance Review Specialist and interviews will be scheduled soon.

- The State 911 Office began the biennial audit with the Office of the Auditor General April 22, 2024.

- The annual report to the legislature draft is in the final stage of completion and proofing by our office. It will then go to the SNC chair then bureau-level for review. We are finalizing the report to the FCC, which is due June 30.

- We continue to work with schools and programs to have their curriculum submitted for SNC approval in an effort to have high school and college students graduate with some or all of their required module I and II certifications.

  The Oakland County Dispatch Academy, which is ran through Oakland Community College, has achieved accreditation! This means they now have five courses offered in which students will earn 11 college credits. This is the first college in Michigan to offer dispatch-specific courses for college credit towards a degree program. More info can be found at here.

- There were seven PSAPs able to meet the very last-minute deadline to submit projects for the OHSP Traffic Safety Grant FY24 funds. The approval process is several steps long and grant awards are expected to go out in September with a start date of Oct 1. FY25 projects will likely open in Feb/March next year.

- Joni is co-chair of the Governance Committee for the NG911 Interoperability Task Force. It's an independent committee led by representatives from private and public sector organizations, including many government agencies that make up the various committees (Steering, Governance, Finance & Technology).

  The task force was created with the goal of establishing a verification/certification program and conformance testing for NG911 networks to ensure they are meeting and/or exceeding national standards. An RFI was released on May 22 and closes on June 22. Questions from respondents were due June 11, and answers will be published June 21. More information can be found on the NG911 Interoperability Task Force website.

- The FCC's NPRM is open for comment regarding the routing of 988 calls. Currently calls are routed using the caller's area code, however this is an inadequate way to route calls in a wireless communications world. It has been suggested that GeoRouting (not to be confused with GeoLocation) would be a more appropriate method of routing these calls. The SNC is

discussing a draft comment at their 6/12 meeting which would support the concept of requiring GeoRouting for 988. The comment period closes 6/28/24.

STATE OF MICHIGAN

MICHIGAN PUBLIC SAFETY COMMUNICATIONS INTEROPERABILITY BOARD

LANSING

STATUS/UPDTAE OF CUURENT ACTIONS REPORT TO THE MPSCIB – COMMUNICATIONS UNIT WORKGROUP

June 2024 Update

Interop Board Action Items

Identify actions or decisions the workgroup is requiring of the board

No actions or decisions are being requested for consideration.

New Items

List items for update and awareness for the board's knowledge since the last quarterly report – Mission Statement

FEMA Region V Emergency Communications Coordinator Jim Jarvis is retiring in August 2024. Jim's work with Michigan's COMU WG helped us achieve many milestones over the years and we would like to publicly thank him for his role in improving interoperability in Michigan.

What's on the Horizon

Identify any work efforts, meetings, or information for upcoming activities the board should be aware of. – Goals

The COMU conducted its annual, full-day, in-person meeting on Monday, May 6. The COMU is considering an audit process similar to how PEMs audit their renewals. The matter is up for discussion at the next June COMU meeting.

Training and Exercises

Identify any training or exercises the workgroup has or will be participating in

Funding for ICTAP Technical Assistance requests has been suspended, forcing the COMU to cancel two INTD courses and one COMT course. The funding freeze also affects requests like updating Michigan's Electronic Field Operations Guide (MI eFOG). A letter from the COMU was provided to Michigan SWIC Brad Stoddard for consideration at the NCSWIC meeting June 5-6.

Michigan's Communications Unit Work Group is a diverse group of 55 public safety communications professionals representing local, county, regional, state and federal agencies from all around Michigan. Except for December, the Communications Unit Work Group meets monthly on the last Wednesday of each month via Zoom. The next meeting is Wednesday, June 26 via Zoom.

STATE OF MICHIGAN

MICHIGAN PUBLIC SAFETY COMMUNICATIONS INTEROPERABILITY BOARD

LANSING

STATUS OF CURRENT ACTIONS REPORT TO THE MPSCIB
JUNE 2024—AUXCOMM WORK GROUP

Interop Board Action Items

New Items

One new state-recognized AUXC this quarter – Collin McConkey bringing the total to 18 state recognized AUXCs in Michigan.

The SEOC AUXCOMM Coordinator Position manual was rewritten, and procedure manuals for stations in the AUXCOMM communications room in the SEOC were developed.

The work group is reviewing the AUXC Continuing Education Record to clarify which items qualify as well as to refine the list to match the position. The plan is to present this in the AUXCOMM update at the September MPSCIB meeting.

What's on the Horizon

Training and Exercises

AUXCOMM courses were held March 16–17 in Marshall, and April 13–14 in Escanaba. There were a total of 23 students between the two classes. Two more courses are planned for the remainder of the year: September 28–29 in Grand Rapids, and November 2–3 in Flint.

The spring statewide AUXCOMM exercise was held May 11. The exercise was centered around a 9.2 severity earthquake centered in the Wabash Valley Seismic Zone. Over 250 volunteers from across the state participated, including 95 from outside the AUXCOMM community, and 17 new or returning after 3 or more years' absence. 14 counties submitted reports, and top scores for the exercise went to Wayne, Luce, and Roscommon counties.

AUXCOMM is participating in planning for the upcoming state exercise in June, the REP exercise in August, and Cobalt Magnet in 2025.

STATE OF MICHIGAN

MICHIGAN PUBLIC SAFETY COMMUNICATIONS INTEROPERABILITY BOARD

LANSING

PUBLIC ALERTING WORK GROUP REPORT TO THE MPSCIB –JUNE 2024

Interop Board Action Items

Identify actions or decisions the workgroup is requiring of the board

New Items

List items for update and awareness for the board's knowledge since the last quarterly report.

- 82 total IPAWS Alerting Authorities (AA), 71 out of 83 counties (86%) are IPAWS AA. Roscommon and Otsego Counties are the newest AAs.

- IPAWS usage statewide 1/1/24-5/24/24: 49 live Wireless Emergency Alerts (WEA) total. (Map image on next page)
- Basics of Public Alerting in Michigan webinar April 10 – recording posted on Public Alerting WG webpage.
- Virtual Effective Message Writing and the Message Design Dashboard (MDD)training continues Bit.ly/Learn2Warn June 6, July 11, August 1 (1-4PM EDT)
  - There is also a 30 minute self-paced training on the MDD bit.ly/MDDSelf-Paced
- Jaclyn Barcroft attended the National Meeting of Alerting Officials April 30-May 1- cohosted by FEMA, CISA, and FCC.

STATE OF MICHIGAN

MICHIGAN PUBLIC SAFETY COMMUNICATIONS INTEROPERABILITY BOARD

LANSING

What's on the Horizon

Identify any work efforts, meetings, or information for upcoming activities the board should be aware of

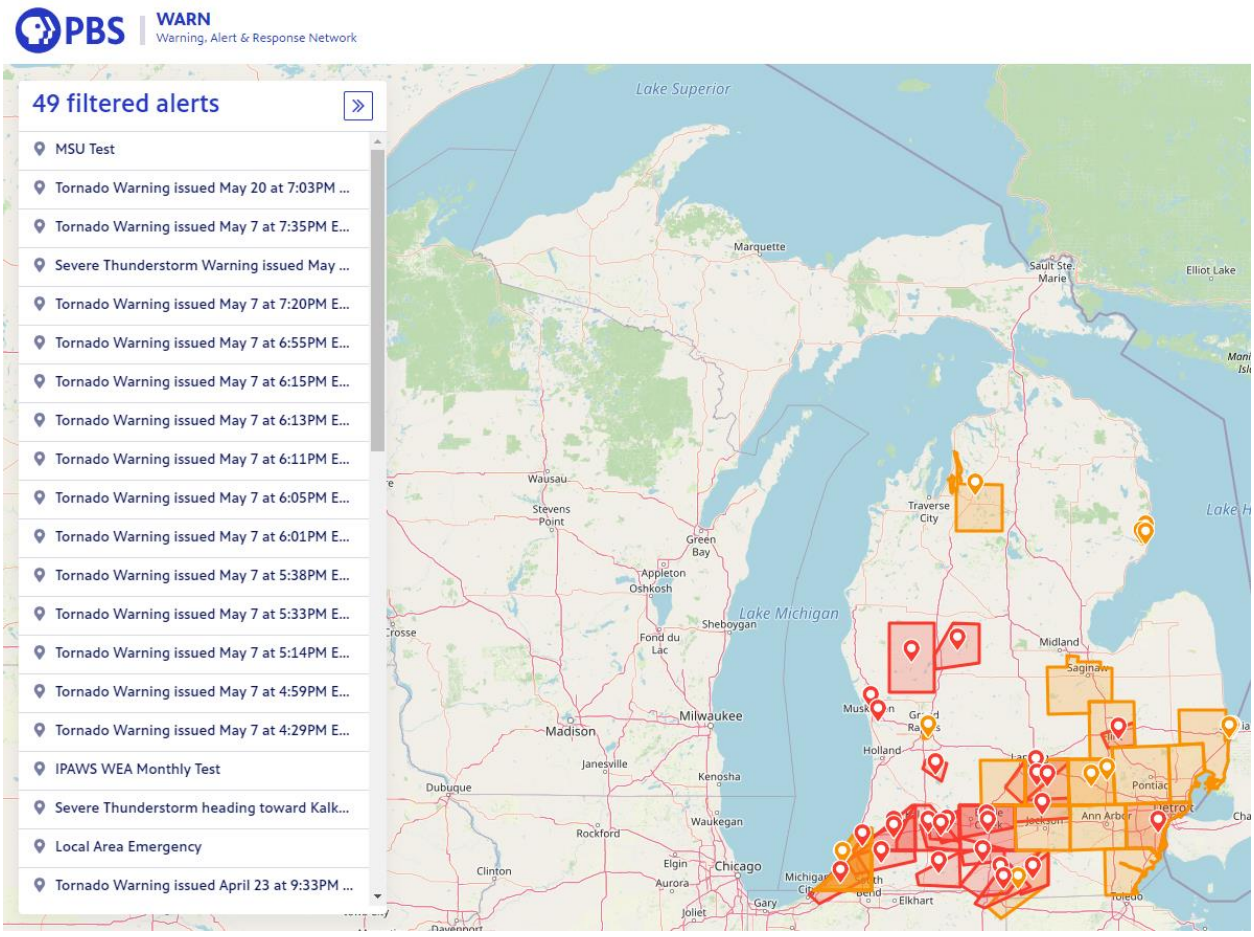
- EMHSD is still working on a Request for Solution (RFS) regarding the redundant EAS project - $1.5M allocation in FY 24 state budget.
- Meetings are being scheduled with the Local Emergency Communications Committees (LECC) between broadcasters and alerting authorities to work on local EAS plans. Starting with Southwest and South Central Regions.

Training and Exercises

Identify any training or exercises the workgroup has or will be participating in

-

49 IPAWS Messages Sent 1/1/24-5/24/24



STATE OF MICHIGAN

MICHIGAN PUBLIC SAFETY COMMUNICATIONS INTEROPERABILITY BOARD

LANSING

STATUS OF CURRENT ACTIONS REPORT TO THE MPSCIB
June 2024 – FIRE PAGING

Interop Board Action Items

- Consider creation of an MPSCS Radio Coverage Work Group, with Mr. Gregory Farrer as chair.

New Items

Paging Work group meeting via Teams every two months.

Emergency Responder Radio Coverage – County Wide Testing Initiative

Allegan County is utilizing a School Safety Grant program to improve the safety and security in schools for students and staff. With the recent increase in requests for School Resource Officers, the Allegan County Administration desires to collaborate on the safer school initiative for Allegan County as it relates to emergency responder radio communications within our schools.

Emergency Responder Radio Coverage UPDATE:

- 40 Allegan County schools agreed to be tested at no cost. All experienced varying degrees of in-building coverage issues. Allegan Area Educational Service Agency (ESA) continues to do a superb job with strategic and budgetary planning to address radio cover performance levels in Allegan Area ESA schools. We anticipate future updates.
- Several phone discussions took place between Mr. Gregory Farrer, Engineering Manager, DTMB, and Greg Janik regarding how to educate and inform stakeholders about the MPSCS BDA registration process. Mr. Farrer also recently shared a very informative PowerPoint. He presented on the registration process, why registration is important, and the impact on the MPSCS with improperly installed or malfunctioning BDA's (signal boosters). We also discussed location mapping, a white paper, and suggested the creation of an MPSCS Radio Coverage Work Group, with Mr. Farrer as chair.
- Mr. Farrer shared an outstanding document regarding BDA registry from The South Carolina Department *of* Administration entitled, South Carolina Public Safety Signal, Recommendations & Requirements. Please see attachments. The most notable statements located within the Introduction on page 5, include: **-The purpose of this document is to help educate, provide guidance, and support the proper installation, registration, and consent form requirements when a jurisdiction requires a building owner to install a public safety signal booster**. If there are public safety signal boosters already installed in your jurisdiction that are not in compliance with the FCC regulations, contact us and we will be glad to help you.
  -The guidance in these signal booster documents was developed by the Palmetto 800 Adversary Committee's **BDA subcommittee to help coordinate statewide guidance for public safety signal booster use and educate users on FCC regulations for public safety signal boosters.**

-The information attached represents key elements that fire officials, building codes officials, and building owners need to be aware of when <u>installing or engineering</u> a signal booster to support public safety and first responders.

- Mr. Farrer and Team will be presenting at the Michigan Fire Inspectors Society (MFIS) Fall Training Seminar, October 1-4, 2024.

Paging UPDATE:

Pager in use numbers are falling behind actual. Business Unit workload and other priorities.

Microsite

- Hamilton test unit operating continuously.

MPSCS Simulcast Implementation

- Berrien County uses MPSCS paging. Converting standalone sites into county simulcast
  - Site ID change requires all pagers and siren activation units to be reprogrammed. (Each device needs to be touched before go live.)
  - Working with Motorola Project Managers to document migration process for future simulcast conversions.
  - Device programming needed:
    - Existing operation
    - Transitional
    - Post Migration

New counties implementing

St Joseph, Menominee, Baraga, Chippewa, Barry, Clinton.

What's on the Horizon

-

Training and Exercises

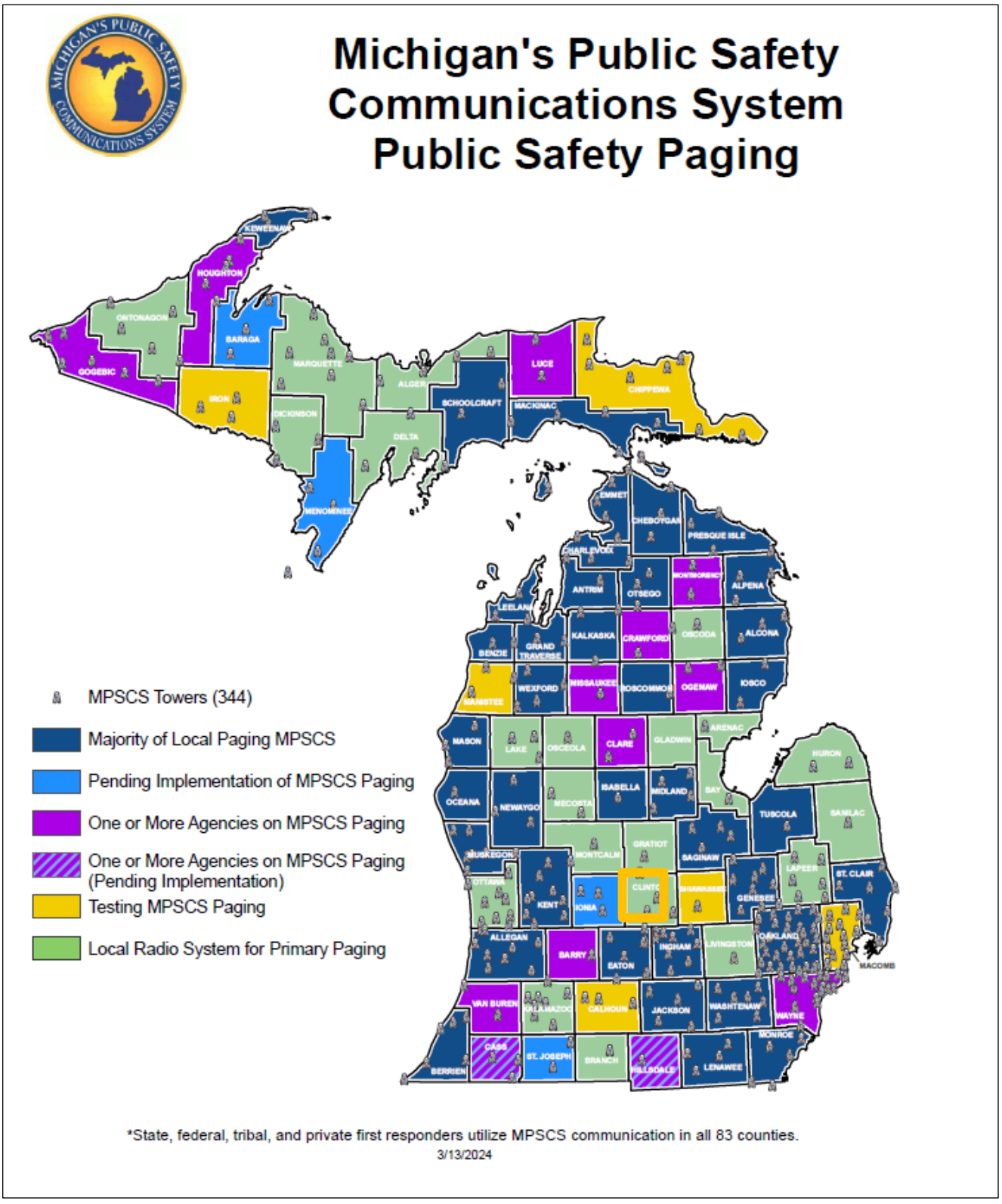
STATE OF MICHIGAN

MICHIGAN PUBLIC SAFETY COMMUNICATIONS INTEROPERABILITY BOARD

LANSING

STATUS OF CURRENT ACTIONS REPORT TO THE MPSCIB

June 2024 – FIRE PAGING



admin
THE SOUTH CAROLINA
DEPARTMENT of ADMINISTRATION

DIVISION of TECHNOLOGY
OPERATIONS
Emergency Services Section
4430 Broad River Road Columbia, SC
29210 (803) 734-2666
palmetto800@admin.sc.gov

Date: July 1, 2021

To: Public Safety & Building Codes Officials

From: DTO Emergency Services

Subject: Public Safety Signal Boosters

The use of public safety signal boosters is a growing consideration for fire marshals and building codes officials across South Carolina. Signal boosters are also referred to as Bi-Directional Amplifier (BDA) systems. A jurisdiction's decision to require a building owner to install a public safety signal booster is a public safety decision for the jurisdiction and an operational cost to building owner. The regulations for the engineering and installation of a signal booster go beyond the International Fire Code (IFC). The Federal Communications Commission (FCC) has very specific regulations on public safety signal boosters and enforces those regulations with potentially significant fines. Public safety signal boosters are signal boosters that ONLY amplify the public safety frequencies or bands utilized by first responders, law enforcement, EMS, and fire, at a specific location. The FCC prohibits these public safety signal boosters from amplifying cellular spectrum bands (cellular requires different equipment and has different regulations).

The purpose of this document is to help educate, provide guidance, and support the proper installation, registration and consent form requirements needed when a jurisdiction requires a building owner to install a public safety signal booster. If there are public safety signal boosters already installed in your jurisdiction that are not in compliance with the FCC regulations contact us and we will be glad to help you.

An in-building public safety signal booster is an extension of the public safety radio system utilized by the jurisdiction. Signal boosters utilize a fixed transmitter and receiver on the public safety radio system and the FCC requires the signal booster to be registered and the Licensee(s) of the radio system must provide written consent for the signal booster to operate on the public safety radio system. If a signal booster malfunctions or begins to isolate (audio begins to echo itself) it can disrupt your public safety communications.

The guidance in these signal booster documents was developed by the Palmetto 800 Advisory Committee's BDA subcommittee to help coordinate statewide guidance for public safety signal booster use and educate users on FCC regulations for public safety signal boosters. The committee included fire marshals, communications officials, LLR, Palmetto 800 users, local governments, and other interested public safety officials from around the state. The information attached represents key elements that fire officials, building codes officials and building owners need to be aware of when installing or engineering a signal booster to support public safety and first responders.

Please do not hesitate to contact our staff if you have any questions palmetto800@admin.sc.gov.

Respectfully,

Randy Childress
803-734-2666
palmetto800@admin.sc.gov

SOUTH CAROLINA
PUBLIC SAFETY SIGNAL BOOSTERS

RECOMMENDATIONS & REQUIREMENTS

October 1, 2021
Version 2.0

Record of Change

Change Number	Change Date	Page Number	Change Description
1	11/01/19	2	Addition of Record of Change
2	11/01/19	9	New FCC/State Labeling Requirements
3	11/01/19	15	Additional FCC Code of Regulations Added
4	11/07/19	13	Corrected coding error in fillable form
5	01/27/20	9	Coaxial Cables - updated to NFPA-1221-2016
6	10/01/21	5, 11, 15	Updated Contact Information
7	10/01/21	6	Removed NFPA 72 References in 1st Paragraph
8	10/01/21	6	Revised Signal Booster Requirements Paragraph
9	10/01/21	8	Signal Strength – updated to IFC 2018 510.4.1.1-2
10	10/01/21	8	Component Enclosures – updated to IFC 2018 510.4.2.4
11	10/01/21	9	Coaxial Cables – updated to NFPA-1221-2019
12	10/01/21	9	Antenna Isolation – updated to IFC 2018 510.4.2.4
13	10/01/21	9	Power Sources – updated to NFPA-1221-2019
14	10/01/21	9	Primary Power Source – updated to NFPA-1221-2019
15	10/01/21	9	Secondary Power Source – updated to NFPA-1221-2019
16	10/01/21	10	Fire Alarm System – updated to IFC 2018 510.4.2.5
17	10/01/21	10	Dedicated Signal Booster Panel – updated to NFPA-1221
18	10/01/21	10	Additional Frequencies – Matched Wording in the Code
19	10/01/21	13	Removed BDA Application Page
20	10/01/21	14	Removed NFPA 72 References in Line Item 1

Table of Contents

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An in-building public safety signal booster is an extension of the public safety radio system utilized by the jurisdiction. Signal boosters utilize a fixed transmitter and receiver on the public safety radio system and the FCC requires the signal booster to be registered and the Licensee(s) of the radio system must provide written consent for the signal booster to operate on the public safety radio system. If a signal booster malfunctions or begins to isolate (audio begins to echo itself) it can disrupt your public safety communications.

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Please do not hesitate to contact our staff if you have any questions palmetto800@admin.sc.gov.

Respectfully,

Randy Childress
803-734-2666
palmetto800@admin.sc.gov

Disclaimer: This document does **NOT** address or represent all National Fire Protection Association NFPA 1221, International Fire Code (IFC), Federal Communications Commission (FCC) regulations and areas of compliance for Public Safety Signal Booster requirements. This document only highlights selected sections for Signal Booster compliance within NFPA 1221, IFC and FCC regulations. The 2018 IFC is adopted in accordance with SC Code of Law 6-9 by the SC Building Code Council. It is codified in regulation as the SC Fire Code in SC Code of Regulations 8-900. Signal Booster design engineers, vendors, contractors, qualified installers and building owner(s) are responsible for full compliance of all Federal, State and Local code requirements.

Palmetto 800 Radio Network. The South Carolina Palmetto 800 Network is a statewide radio network that provides primary public safety radio communications for hundreds of jurisdictions across South Carolina. The network is made up of FCC Licensees from numerous authorities having jurisdiction (AHJ).
As the administrator and primary Licensee for the Palmetto 800 Network, the SC Public Safety Communications Section is providing coordination between the Licensees and jurisdictions to simplify the process for building owners, signal booster vendors and users of the Palmetto 800 Network.

What is an Emergency Responder Communication Enhancement System? (ERCES). An infrastructure solution installed within a building to enhance the communications capabilities for first responders that utilizes solutions such as a signal booster, voting receiver, base station, or other technology capable of enhancing the radio frequency (RF) to ensure effective public safety communications.

What Is a Signal Booster? A device or system that automatically receives, amplifies, and retransmits signals from wireless stations into and out of building interiors, tunnels, shielded outdoor areas and other locations where these signals would otherwise be too weak for reliable communications. Sometimes referred to as a bi-directional amplifier (BDA) system. Signal booster systems may contain both Class A and Class B signal boosters as components.

What Buildings May Require A Signal Booster?
The SC Fire Code requires signal boosters in any building, new or existing, when the emergency responder communication coverage is compromised due to the construction materials of the building. This requirement is enforced by the local building and fire code officials (authority having jurisdiction, AHJ) and may vary from jurisdiction to jurisdiction.

For new construction, the SC Office of State Fire Marshal **recommends** that AHJ's consider the following exceptions which will be published in the 2024 South Carolina Fire Code.

> Emergency Responder Communication Enhancement Systems are required in all new buildings except the following:
>
> 1. Where it is determined by the fire code official that the radio communications coverage system is not needed.
> 2. One-story buildings not exceeding 12,000 square feet with no below ground area(s).

Distributed Antenna System (DAS). A network of spatially separated antenna nodes connected to a common source via a transport medium that provides wireless service within a structure.

FCC Required Certification. All repeaters, transmitters, receivers, and signal boosters shall be installed and operated in a manner consistent with Title 47, CFR Within these regulations is a mandatory requirement that repeaters, transmitters, and signal boosters have Federal Communications Commission (FCC) "certification." FCC certification verification can be obtained from any FCC office or online https://www.fcc.gov/oet/ea/fccid.

Signal Booster Types.

Class A signal booster. A signal booster designed to retransmit signals on one or more specific channels. A signal booster is deemed to be a Class A signal booster if none of its passbands exceed 75 kHz.
Class B signal booster. A signal booster designed to retransmit any signals within a wide frequency band. A signal booster is deemed to be a Class B signal booster if it has a passband that exceeds 75 kHz.
What is a Passband. A passband is the range of frequencies or wavelengths that can pass through a filter. For example, a radio receiver contains a bandpass filter to select the frequency of the desired radio signal out of all the radio waves picked up by its antenna. The passband of a receiver is the range of frequencies it can receive.

Signal Booster Design & Engineering: Where an engineering design is needed or required, a signal booster design software such as IB-Wave shall be used by engineers for signal predication in new or existing construction and design layout.

Public Safety Signal Boosters. FCC (47 §CFR 90.219(7)) Signal booster passbands are limited to the service band or bands for which the operator (Licensee) is authorized (Licensed). In general, signal boosters should utilize the minimum passband that is sufficient to accomplish the Public Safety purpose. Except for distributed antenna systems (DAS) installed in buildings, the passband of a Class B signal booster should **not** encompass both commercial services (such as Enhanced Specialized Mobile Radio (ESMR) and Cellular systems) and part §90 Land Mobile and Public Safety Services.

Deployment. FCC (47 §90.203(a)(2) and part 2, subpart J) Deployment of public safety signal boosters must be carried out in accordance with the rules in this paragraph.

(1) Signal boosters may be used to improve coverage in weak signal areas only.
(2) Signal boosters must not be used to extend Private Land Mobile Radio Service(s) (PLMRS) stations' normal operating range.
(3) Except as set forth in paragraph (d)(3)(ii) of this section, signal boosters must be deployed such that the radiated power of each retransmitted channel, on the forward link and on the reverse link, does not exceed 5 Watts effective radiated power (ERP).

FCC Minimum qualifications of personnel. The minimum qualifications of the system designer and lead installation personnel shall include both of the following (2018 IFC 510.5.2):

(1) A valid FCC-issued general radio operator's license.
(2) Certification of inbuilding system training issued by a nationally recognized organization, school or a certificate issued by the manufacturer of the equipment being installed.

Authority to Operate A Signal Booster Requirements. Signal boosters (Class A & Class B) must be in compliance with all NFPA 1221, IFC and FCC regulations and installed by a qualified installer. Non-licensees (such as a building owner or a signal booster installation contractor(s)) seeking to operate signal boosters must obtain the express consent of the licensee(s) for the frequencies which the device or system is intended to amplify. The consent must be maintained in a recordable format that can be presented to an FCC representative or other relevant licensee(s) investigating interference. All Class B signal boosters (as defined in 47 §CFR 90.219) must be registered online at www.fcc.gov/signalboosters/registration prior to activation and testing of the signal booster.

Authority Having Jurisdiction (AHJ). All signal booster's installations must also be in compliance with the authority having jurisdiction (AHJ) building codes and fire codes. Local jurisdictions may require a permit and have additional requirements or policies from those listed in this document.

Non-Licensee Requirements. All non-licensees installing Signal Boosters (Class A or B) amplifying public safety spectrum must receive written consent from the FCC licensee(s). Jurisdictions using the Palmetto 800 radio network FCC licenses, should e-mail Palmetto800@admin.sc.gov for frequency, site, and Consent of Licensee Application information.

FCC Required Registration for Class B Signal Booster(s). To register a Class B signal booster(s), you will first need an FCC Registration Number (FRN). The signal booster installer, building owner or licensee must register the booster. If you do not already have a (FRN) you can register for a (FRN) at https://www.fcc.gov/wireless/support/universal-licensing-system-uls-resources/getting-fccregistration-number-frn go to the FCC Commission's Registration Systems (CORES). Once you have an FRN you can proceed to www.fcc.gov/signal-boosters/registration to register your signal booster(s). If multiple signal boosters are required, each must be registered separately. You will need the Licensee's frequency license number(s) to complete the registration.

Signal Strength.

> **Inbound**. **IFC 2018 510.4.1.1 Minimum signal strength into the building**.
> The minimum inbound signal strength shall be sufficient to provide usable voice communications throughout the coverage area as specified by the *fire code official*. The inbound signal level shall be sufficient to provide not less than a Delivered Audio Quality (DAQ) of 3.0 or an equivalent Signal-to-Interference-Plus-Noise Ratio (SINR) applicable to the technology for either analog or digital signals.
>
> **Outbound**. **IFC 2018 510.4.1.2 Minimum signal strength out of the building**.
> The minimum outbound signal strength shall be sufficient to provide usable voice communications throughout the coverage area as specified by the *fire code official*. The outbound signal level shall be sufficient to provide not less than a DAQ of 3.0 or an equivalent
> SINR applicable to the technology for either analog or digital signals.

Component Enclosures. **IFC 2018 510.4.2.4 Signal booster requirements.** All signal booster components shall be contained in a National Electrical Manufacturer's Association (NEMA) 4-type waterproof cabinet.
Battery systems used for the emergency power source shall be contained in a NEMA 3R or higher-rated cabinet.

Coaxial Cables. NFPA-1221-2019 (9.6.2.1 thru 9.6.2.4) The backbone, antenna distribution, radiating, or any fiber-optic cables shall be rated as plenum cables. The backbone cables shall be connected to the antenna distribution, radiating, or copper cables using hybrid coupler devices of a value determined by the overall design. Backbone cables shall be routed through an enclosure that matches the building's fire rating. The connection between the backbone cable and the antenna cables shall be made within an enclosure that matches the building's fire rating, and passage of the antenna distribution cable in and out of the enclosure shall be fire-stopped.

Antenna Isolation. IFC 2018 (510.4.2.4) Where a donor antenna exists, isolation shall be maintained between the donor antenna and all inside antennas to not less than 20dB greater than the system gain under all operating conditions.

Oscillation Suppression. Signal boosters utilized to enhance Public Safety radio coverage shall utilize oscillation prevention circuitry (2018 IFC 510.4.2.4(5)) in the design of the signal booster to reduce public safety radio interference. Public safety radio signal boosters and distributed antenna systems (DAS) should only be deployed in areas where signal enhancement is required to prevent transmitter oscillation. Signal booster systems that begin oscillating should immediately notify the authorities having jurisdiction (AHJs), alarm company or vendor servicing the signal booster. Continued signal booster(s) oscillation will directly interfere with public safety radio operations.

Power Sources. NFPA-1221-2019 (9.6.12) At least two (2) independent and reliable power supplies shall be provided for all RF-emitting devices, one primary and one secondary.

Primary Power Source. NFPA-1221-2019 (9.6.12.1) The primary power source shall be supplied from a dedicated branch circuit and comply with NFPA 72-2019-10.6.5.

Secondary Power Source. NFPA-1221-2019 (9.6.12.2) The secondary power source shall consist of one of the following:

(1) A storage battery dedicated to the system with at least 12 hours of 100 percent system operation capacity.
(2) An alternate power source of 12 hours at 100 percent system operation capacity as approved by the AHJ.

System Monitoring: IFC 2018 (510.4.2.5) The emergency responder radio enhancement system shall be monitored by a listed fire alarm control unit, or where approved by the fire code official, shall sound an audible signal at a constantly attended (7x24) on-site location.

Fire Alarm System. IFC 2018 (510.4.2.5) The emergency responder radio enhancement system shall be monitored by a listed *fire alarm control unit*, or where approved by the *fire code official*, shall sound an audible signal at a constantly attended on-site location. Automatic supervisory signals shall include the following:

(1) Loss of normal AC power supply
(2) System battery charger(s) failure
(3) Malfunction of the donor antenna(s)
(4) Failure of active RF-emitting device(s)
(5) Low-battery capacity at 70-percent reduction of operating capacity
(6) Failure of critical system components
(7) The communications link between the *fire alarm system* and the emergency responder radio enhancement system

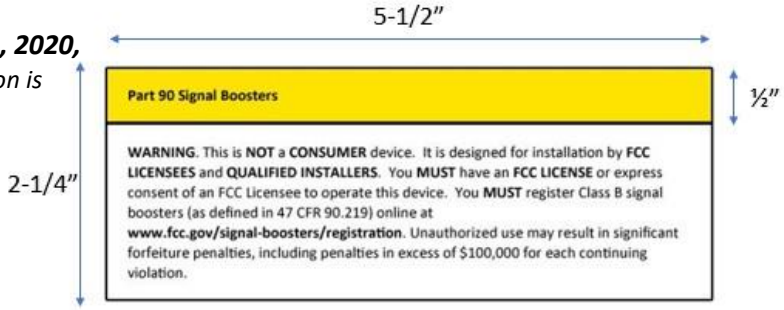
Dedicated Signal Booster Panel. NFPA-1221-2019 (9.6.13.2.1) A dedicated annunciator shall be provided within the fire command center to annunciate the status of all RF-emitting devices and active system component locations. This device shall provide visual and labeled indications of the following for each system component and RF-emitting device:

(1) Normal ac power
(2) Loss of normal ac power
(3) Battery charger failure
(4) Low-battery capacity (i.e., to 70 percent depletion)
(5) Donor antenna malfunction
(6) Active RF-emitting device malfunction
(7) Active system component malfunction

Additional Frequencies and Change of Frequencies. 2018 IFC (510.4.2.6) The emergency responder radio coverage system shall be capable of modification or expansion in the event frequency changes are required by the FCC or other radio licensing authority, or additional frequencies are made available by the FCC or other radio licensing authority.

FCC Required Device Labeling. Signal booster(s) must be labeled to indicate whether it's a Class A or Class B and must be included on marketing materials, instruction manuals, packaging and on the **FRONT** of the device, the following advisory; "WARNING. This is NOT a CONSUMER device. It is designed for installation by FCC LICENSEES and QUALIFIED INSTALLERS. You MUST have a FCC LICENSE or express consent of an FCC Licensee to operate this device. You MUST register Class B signal boosters (as defined in 47 CFR §90.219) online at www.fcc.gov/signal-boosters/registration . The consent must be maintained in a recordable format that can be presented to an FCC representative or other relevant licensee investigating interference. Unauthorized use may result in significant forfeiture penalties, including penalties in excess of $100,000 for each continuing violation."

Effective January 1, 2020, *this label configuration is required!*



The minimum label size shall be 5-1/2 inches by 2-1/4 inches with a ½" yellow banner. The warning label must be clearly distinguishable, include the same wording listed above and utilize a #10 font or larger.

South Carolina Public Safety Signal Boosters
Recommendations & Requirements

FCC Required Certification. Use of repeaters, transmitters, or signal boosters that do not have an existing FCC-issued certification is a violation of federal law, and users are subject to fine and/or imprisonment. A label displaying the exact FCC certification number must be placed in a visible place on the equipment itself.

Underwriters Laboratories (UL) 2524. It is suggested that Signal Boosters have a UL-2524 In-building Two-Way Emergency Radio Communications Enhancement Systems listing.

System Design and Deployment Questions. For radio frequency channels, repeater site locations and radio system questions please contact palmetto800@admin.sc.gov to request a Consent of Licensee Application. All other questions should be directed to the authority having jurisdiction (AHJ). Please provide the following information in your request;

(1) Address or Longitude/Latitude
(2) Type and height of structure
(3) Your contact information
(4) The contact information for the (AHJ)
(5) Signal booster type (Class A or B)
(6) Brand, Model of the signal booster if known
(7) Local jurisdiction where the Signal Booster will be installed
(8) Fire jurisdiction where the Signal Booster will be installed

How Can I Check To See if A Class B Signal Booster Has Been Registered? Go to the FCC Signal Booster registration link www.fcc.gov/signal-boosters/registration at the top of the page, on the right side click on Find Boosters. This will allow you numerous search options.

FCC Required Consent of Licensee Application. For obtaining a Palmetto 800 network Signal Booster Consent of Licensee Application, see the consent of licensee application on page 12.

Contact Information:
South Carolina Department of Administration, Division of Technology Operations,
Emergency Services Section
4430 Broad River Road, Columbia, SC 29210
palmetto800@admin.sc.gov or 803-734-2666

South Carolina Public Safety Signal Boosters
Recommendations & Requirements

Signal Booster Consent of Licensee Application process: The South Carolina Division of Technology Operations, Emergency Services Section will facilitate the coordination of public safety signal booster installations across the state. Beginning October 1, 2021, Signal Booster Consent of Licensee Applications and Retransmission Authorizations will be processed through a new online portal. Public safety signal boosters may be required by the local AHJ for any new or existing building in accordance with the requirements of the SC Fire Code.

1. In accordance with the requirements of the SC Fire Code, new or existing buildings whose emergency responder communication coverage is compromised due to the construction materials of the building should have a signal booster design and engineering study to determine if all or portions of the building require a public safety signal booster. Consult with the local authority having jurisdiction (AHJ).

2. If needed, frequency and tower location information needed to complete the signal booster design and engineering study is available from the public safety licensee holder upon request.

3. If it is determined that an ERCES is required, the installer must notify the FCC licensee & the South Carolina Division of Technology Operations, Emergency Services Section to apply for a Retransmission Consent Authorization Agreement. To apply email palmetto800@admin.sc.gov to receive a link to the online application survey.

4. Complete the online application. The coordinates should represent the location the equipment is installed as accurately as possible, not the coordinates of the site or building address. All fields on the application are required. If you have any questions please contact the South Carolina Division of Technology Operations, Emergency Services Section at palmetto800@admin.sc.gov.

5. Retransmission Consent Authorization forms will be issued by the South Carolina Division of Technology Operations, Emergency Services Section, or the appropriate FCC licensee

6. The consent authorization must be maintained by the building owner in a recordable format that can be presented to an FCC representative or other relevant licensee investigating interference.

7. Notify the public safety licensee when the signal booster installation is complete.

8. You MUST have Class B signal boosters registered (as defined in 47 CFR §90.219) at www.fcc.gov/signal-boosters/registration. Coordinate with the public safety licensee to determine the best way to have your device registered.

NOTE: Unauthorized use of a signal booster may result in significant FCC forfeiture penalties, including penalties in excess of $100,000 for each continuing violation.

admin
THE SOUTH CAROLINA DEPARTMENT of ADMINISTRATION

Henry McMaster, *Governor*
Marcia S. Adams, *Executive Director*

DIVISION *of* TECHNOLOGY OPERATIONS
Emergency Services Section
4430 Broad River Road
Columbia, SC 29210
palmetto800@admin.sc.gov

Palmetto 800 Retransmission Consent Authorization

The South Carolina Department of Administration, Division of Technology of Operations, Emergency Services Section (State) hereby grants authorization to _____ (Operator), to operate a two-way public safety radio communications signal booster (System) on 700/800 MHz public safety frequencies licensed to the South Carolina Division of Technology Operations (Licensee) by the Federal Communications Commission (FCC) under call sign(s) _____, _____ and _____ at the following location:

Name: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Latitude: _____ Longitude: _____

Signal Booster Brand/Model: _____ Class: _____

Contact: _____

Phone: _____ E-mail: _____

This Authorization is subject to the following conditions:

1. The signal booster shall be operated, maintained, and tested annually in accordance with manufacturer's instructions, the International Fire Code (IFC), FCC rules and regulations and National Fire Protection Association (NFPA) 1221 National Fire Alarm and Signaling Code, 2018 edition.

2. The signal booster shall not cause interference to radio systems or equipment operated by the State or any other FCC licensee.

3. Signal booster passbands are limited to the service band or bands for which the public safety Licensee is authorized. In general, signal boosters should utilize the minimum passband that is sufficient to accomplish the purpose. Except for distributed antenna systems (DAS) installed in buildings, the passband of a Class B booster should not encompass both commercial services (such as ESMR and Cellular Radiotelephone) and part 90 Land Mobile and Public Safety Services.

Sample Document

4. The Operator shall promptly resolve any interference that occurs to radio systems, equipment of the State or any FCC licensee, up to and including deactivation of the signal booster, if necessary, until such time the interference is corrected.

5. In the event of an outage of the signal booster, the Operator shall notify the authority having jurisdiction (AHJ) in accordance with the regulations, policies and procedures for reporting any fire alarm/fire safety system outage.

6. The Operator shall provide access to the signal booster for inspection upon request by the State, AHJ or the FCC.

7. A separate retransmission authorization shall be obtained for each headend location in the system design and posted conspicuously with the headend equipment.

8. The signal booster must be labeled in accordance with FCC requirements to indicate whether it's a Class A or Class B and must include the following advisory:

   "WARNING. This is NOT a CONSUMER device. It is designed for installation by FCC LICENSEES and QUALIFIED INSTALLERS. You MUST have an FCC LICENSE or express consent of an FCC Licensee to operate this device. You MUST register Class B signal boosters (as defined in 47 CFR 90.219) online at www.fcc.gov/signal-boosters/registration . The consent must be maintained in a recordable format that can be presented to an FCC representative or other relevant licensee investigating interference. Unauthorized use may result in significant forfeiture penalties, including penalties in excess of $100,000 for each continuing violation."

9. Class B signal boosters must be registered with the FCC (as defined in 47 CFR 90.219) at www.fcc.gov/signal-boosters/registration prior to testing and utilization.

10. The State, as FCC licensee of the frequencies, reserves the right to terminate this consent authorization at its discretion.

If you have questions, please e-mail palmetto800@admin.sc.gov or call (803) 734-2666.

_____ Date:_____

SC Division of Technology Operations
Emergency Services Section

cc: Local Fire Marshal

Sample Document

Federal Communications Commission

Part 90 Signal Boosters

Part 90 Signal Boosters are a type of Industrial Signal Booster. Part 90 Signal Boosters sold and marketed starting on March 1, 2014 must meet new FCC requirements. In addition, Class B Signal Boosters must be registered directly with the FCC before being used.

Register Your Part-90 Class B Signal Booster(https://signalboosters.fcc.gov/signal-boosters/)

On February 20, 2013, the FCC released a Report and Order that included the following actions related to Part 90 Signal Boosters:

- Clarification of FCC rules to make it clear that non-licensees who seek to operate signal boosters must obtain the consent of the licensee[s] whose signals they intend to amplify;
- Adoption of a registration requirement for existing and future Class B signal booster installations;
- Permit Part 90 licensees to deploy Class A (narrowband) signal boosters in both fixed and mobile environments provided that they do not cause interference to other licensed services in the band. Prohibit mobile deployment of Class B (wideband) signal boosters, but allow fixed deployment of Class B signal boosters;
- Require system integrators and installers to consider the potential adverse effects of the increased noise floor on PLMR systems and establish additional emission limits to reduce the interference potential of signal boosters;
- Update the FCC equipment authorization process to differentiate between Class A and Class B signal boosters and testing procedures;
- Establish labeling requirements to promote compliance with FCC rules; and
- Clarify certain definitions and power requirements.

Several of these changes are highlighted below with additional information.

Part 90 Signal Booster Classifications

Class A signal booster. A signal booster designed to retransmit signals on one or more specific channels. A signal booster is deemed to be a Class A signal booster if none of its passbands exceed 75 kHz.

Class B signal booster. A signal booster designed to retransmit any signals within a wide frequency band. A signal booster is deemed to be a Class B signal booster if it has a passband that exceeds 75 kHz.

Registration System for Class B Signal Boosters

On February 20, 2013, the FCC released a Report and Order that included a requirement for new and existing Class B signal boosters to be registered with the FCC. By creating a permanent record of all Class B signal booster installations in a searchable database, licensees will be able to search online for signal booster installations if they experience interference or other degradations to their system. This will allow licensees to identify and shut down signal boosters causing harmful interference as necessary.

Licensees and signal booster operators were required to register existing Class B signal booster installations with the FCC by November 1, 2014. After November 1, 2014, operation of an existing, unregistered Class B signal booster is unauthorized and subject to enforcement action. Any new Class B signal booster installed after November 1, 2014 must be registered prior to operation. To encourage compliance with this new requirement, registration will be free of cost to the operator and/or licensee.

Manufacturers and Labeling Requirements

As of February 20, 2013, the FCC will no longer accept applications for equipment certification for Part 90 Signal Boosters that do not comply with the FCC's new rules. In addition, the FCC will cease certification of devices which do not comply with the new rules. As of March 1, 2014, all Industrial Signal Boosters sold and marketed in the United States must meet the FCC's new rules.

Transition Process

The FCC established a two-step transition process for equipment certification for Part 90 Signal Boosters sold and marketed in the United States.

Labeling Requirements

Part 90 Signal Boosters must include a label with the following information:

1. As of February 20, 2013, the FCC will no longer accept applications for equipment certification for Part 90 Signal Boosters that do not comply with the FCC's new rules. In addition, the FCC will cease certification of devices which do not comply with the new rules.
2. As of March 1, 2014, all Industrial Signal Boosters sold and marketed in the United States must meet the FCC's new rules.

It is possible that the warning label looks different than the sample label below. However, the warning label must include the same information.

Part 90 Signal Boosters
WARNING. This is **NOT** a **CONSUMER** device. It is designed for installation by **FCC LICENSEES** and **QUALIFIED INSTALLERS.** You **MUST** have an **FCC LICENSE** or express consent of an FCC Licensee to operate this device. You **MUST** register Class B signal boosters (as defined in 47 CFR 90.219) online at **www.fcc.gov/signal-boosters/registration.** Unauthorized use may result in significant forfeiture penalties, including penalties in excess of $100,000 for each continuing violation.

Bureau/Office:

Wireless Telecommunications (https://www.fcc.gov/wireless-telecommunications)

Tags:

Signal Boosters (/tags/signal-boosters) - Wireless Services (/tags/wireless-services)

ELECTRONIC CODE OF FEDERAL REGULATIONS

e-CFR data is current as of November 1, 2019

Title 47: Telecommunication
PART 90—PRIVATE LAND MOBILE RADIO SERVICES Subpart I—General
Technical Standards

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§90.219 Use of signal boosters.

This section contains technical and operational rules allowing the use of signal boosters in the Private Land Mobile Radio Services (PLMRS). Rules for signal booster operation in the Commercial Mobile Radio Services under part 90 are found in §20.21 of this chapter.

(a) *Definitions.* The definitions in this paragraph apply only to the rules in this section.

Class A signal booster. A signal booster designed to retransmit signals on one or more specific channels. A signal booster is deemed to be a Class A signal booster if none of its passbands exceed 75 kHz.

Class B signal booster. A signal booster designed to retransmit any signals within a wide frequency band. A signal booster is deemed to be a Class B signal booster if it has a passband that exceeds 75 kHz.

Coverage area of a PLMRS station. All locations within the normal reliable operating range (service contour) of a PLMRS station.

Deploy a signal booster. Install and/or initially adjust a signal booster.

Distributed Antenna System (DAS). A network of spatially separated antenna nodes connected to a common source via a transport medium that provides wireless service within a geographic area or structure.

Operate a signal booster. Maintain operational control over, and responsibility for the proper functioning of, a signal booster.

Signal booster. A device or system that automatically receives, amplifies, and retransmits signals from wireless stations into and out of building interiors, tunnels, shielded outdoor areas and other locations where these signals would otherwise be too weak for reliable communications. Signal booster systems may contain both Class A and Class B signal boosters as components.

(b) *Authority to operate.* PLMRS licensees for stations operating on assigned channels higher than 150 MHz may operate signal boosters, limited to the service band for which they are authorized, as needed anywhere within the PLMRS stations' service contour, but may not extend the stations' service contour.

(1) PLMRS licensees may also consent to operation of signal boosters by non-licensees (such as a building owner or a signal booster installation contractor) within their service contour and across their applicable frequencies, but must maintain a reasonable level of control over these operations in order to resolve interference problems.

(i) Non-licensees seeking to operate signal boosters must obtain the express consent of the licensee(s) of the frequencies for which the device or system is intended to amplify. The consent must be maintained in a recordable format that can be presented to an FCC representative or other relevant licensee investigating interference.

(ii) Consent is not required from third party (unintended) licensees whose signals are incidentally retransmitted. However, signal booster operation is on a non-interference basis and operations may be required to cease or alter the operating parameters due to a request from an FCC representative or a licensee's request to resolve interference.

(2) [Reserved]

(c) *Licensee responsibility; interference.* PLMRS licensees that operate signal boosters are responsible for their proper operation, and are responsible for correcting any harmful interference that signal booster operation may cause to other licensed communications services. Normal co-channel transmissions are not considered to be harmful interference. Licensees are required to resolve interference problems pursuant to §90.173(b). Licensees shall act in good faith regarding the operation of signal boosters and in the resolution of interference due to signal booster operation. Licensees who are unable to determine the location or cause of signal booster interference may seek assistance from the FCC to resolve such problems.

(d) *Deployment rules.* Deployment of signal boosters must be carried out in accordance with the rules in this paragraph.

(1) Signal boosters may be used to improve coverage in weak signal areas only.

(2) Signal boosters must not be used to extend PLMRS stations' normal operating range.

(3)(i) Except as set forth in paragraph (d)(3)(ii) of this section, signal boosters must be deployed such that the radiated power of each retransmitted channel, on the forward link and on the reverse link, does not exceed 5 Watts effective radiated power (ERP).

(ii) Railroad licensees may operate Class A signal boosters transmitting on a single channel with up to 30 Watts ERP on frequencies 452/457.9000 to 452/457.96875 MHz in areas where communication between the front and rear of trains is unsatisfactory due to distance or intervening terrain barriers.

(4) Class B signal boosters may be deployed only at fixed locations; mobile operation of Class B signal boosters is prohibited after November 1, 2014.

(5) Class B signal booster installations must be registered in the FCC signal booster database that can be accessed at the following URL: *www.fcc.gov/signal-boosters/registration.*

(6) Good engineering practice must be used in regard to the radiation of intermodulation products and noise, such that interference to licensed communications systems is avoided. In the event of harmful interference caused by any given deployment, the FCC may require additional attenuation or filtering of the emissions and/or noise from signal boosters or signal booster systems, as necessary to eliminate the interference.

(i) In general, the ERP of intermodulation products should not exceed −30 dBm in 10 kHz measurement bandwidth.

(ii) In general, the ERP of noise within the passband should not exceed −43 dBm in 10 kHz measurement bandwidth.

(iii) In general, the ERP of noise on spectrum more than 1 MHz outside of the passband should not exceed −70 dBm in a 10 kHz measurement bandwidth.

(7) Signal booster passbands are limited to the service band or bands for which the operator is authorized. In general, signal boosters should utilize the minimum passband that is sufficient to accomplish the purpose. Except for distributed antenna systems (DAS) installed in buildings, the passband of a Class B booster should not encompass both commercial services (such as ESMR and Cellular Radiotelephone) and part 90 Land Mobile and Public Safety Services.

(e) *Device Specifications.* In addition to the general rules for equipment certification in §90.203(a)(2) and part 2, subpart J of this chapter, a signal booster must also meet the rules in this paragraph.

(1) The output power capability of a signal booster must be designed for deployments providing a radiated power not exceeding 5 Watts ERP for each retransmitted channel.

(2) The noise figure of a signal booster must not exceed 9 dB in either direction.

(3) Spurious emissions from a signal booster must not exceed −13 dBm within any 100 kHz measurement bandwidth.

(4) A signal booster must be designed such that all signals that it retransmits meet the following requirements:

(i) The signals are retransmitted on the same channels as received. Minor departures from the exact provider or reference frequencies of the input signals are allowed, *provided that* the retransmitted signals meet the requirements of §90.213.

(ii) There is no change in the occupied bandwidth of the retransmitted signals.

(iii) The retransmitted signals continue to meet the unwanted emissions limits of §90.210 applicable to the corresponding received signals (assuming that these received signals meet the applicable unwanted emissions limits by a reasonable margin). (5) On or after March 1, 2014, a signal booster must be labeled to indicate whether it is a Class A or Class B device, and the label must include the following advisory

(1) In on-line point-of-sale marketing materials,

(2) In any print or on-line owner's manual and installation instructions, (3) On the outside packaging of the device, and

(4) On a label affixed to the device:

"WARNING. This is NOT a CONSUMER device. It is designed for installation by FCC LICENSEES and QUALIFIED INSTALLERS. You MUST have an FCC LICENSE or express consent of an FCC Licensee to operate this device. You MUST register Class B signal boosters (as defined in 47 CFR 90.219) online at *www.fcc.gov/signal-boosters/registration*. Unauthorized use may result in significant forfeiture penalties, including penalties in excess of $100,000 for each continuing violation."

STATE OF MICHIGAN

MICHIGAN PUBLIC SAFETY COMMUNICATIONS INTEROPERABILITY BOARD

LANSING

STATUS OF CURRENT ACTIONS REPORT TO THE MPSCIB
05/29/2024 ENCRYPTION WORKGROUP

Interop Board Action Items

N/A

New Items

Old Business:
Meeting was held on Thursday May 2, 2024, to further discuss the decision to pause on the prohibition of new talkgroups with ADP and or DES. Matt Grosser explained the concerns that were remitted to him by local agencies that played into that decision. CJIS Requirements- No new information nor engagement for any future meetings.

What's on the Horizon

Workgroup focus on the following items:

1. **VanBuren CO-** Van Buren is moving towards AES encryption for day-to-day operations leaving the 80P911 in the clear as it currently is. They are all strapped with common MPSCS AES Key
    - 80DRUGE
    - 80LAWE
    - 80LEINE
    - MSP already has these added and they are VBCO consoles. (that dist radios are AES capable)
    - DNR was informed of this transition.
    - Full county-wide implementation will be dependent on when upgrades are received, and programming is completed.
2. **Barry CO**- Barry Co is moving the direction of AES encryption, the request was made to TDU in early May, both AES with common MPSCS Key-
    - 08P911E
    - 08LEIN
3. **Allegan Co-** Allegan is moving towards primary dispatching on an ADP talkgroup that was created, strapped with MPSCS ADP CKR-
    - 03LAWE- currently they are using an existing talkgroup called 03ALTAC which exists in all radios in Allegan including MSP and DNR.
    - Final implementation will be dependent on reprogramming completion as they are using this opportunity to incorporate other changes from surrounding counties.
    - Matt and Tim met with Allegan County 911 Director to discuss this implementation and “lessons learned”.

Training and Exercises

STATE OF MICHIGAN

MICHIGAN PUBLIC SAFETY COMMUNICATIONS INTEROPERABILITY BOARD

LANSING

Next meeting will be held on June 4, 2024, at 10:00am via Microsoft Teams meeting.

STATE OF MICHIGAN

MICHIGAN PUBLIC SAFETY COMMUNICATIONS INTEROPERABILITY BOARD

LANSING

STATUS/UPDTAE OF CUURENT ACTIONS REPORT TO THE MPSCIB - SECURITY WORKGROUP

June 2024 Update

Interop Board Action Items

Identify actions or decisions the workgroup is requiring of the board

None at this time

New Items

List items for update and awareness for the boards knowledge since the last quarterly report – Mission Statement

Work group members have participated in multiple meetings related to the Cyber Security grant. The FY22 grant has been approved by FEMA and work has now begun on the FY23 grant application.

Members also attended the GLHSC this past quarter.

What's on the Horizon

Identify any work efforts, meetings, or information for upcoming activities the board should be aware of. – Goals

Security Workgroup members will continue to be involved with the development and implementation of the FY22 and FY23 cyber grant.

Training and Exercises

Identify any training or exercises the workgroup has or will be participating in

Workgroup members participated in the planning for the InterOp Conference

Workgroup members participating in the planning and attendance at the Great Lakes Homeland Security Conference

Workgroup members participated in CISA's Cyber Symposium for members of the 911 community.

Workgroup members participated in planning meetings for the 2024 Functional Statewide Exercise

Workgroup members participated in planning meetings for the 2025 Cobalt Magnet Exercise

CISA is planning a 2-Day workshop for PSAP directors. Members of this workgroup are assisting in the planning of that event.

Bi Monthly meetings to continue in 2024.

Next meeting is slated for July 22, 2024 at 2pm.

Michigan's Public Safety Communications Interoperability Board

3/13/24 Meeting Minutes

MSP HQ - 1917 Room

1. **Chair Bryce Tracy called the meeting to order at 2:00pm. Roll call was taken and is noted below.**

Board Member	Present, Absent or Virtual
Ms. Brianna Briggs	Virtual – Derek Flory
Mr. Gary Hagler	Present
Mr. Thomas LaFave	Absent
Mr. Sean McCarthy	Present
Chief Edwin Miller	Absent
Mr. Matthw Sahr	Absent
Fire Marshal Kevin Sehlmeyer	Absent
Colonel Raymond Stemitz	Present
Mr. Brad Stoddard	Present
Captain Kevin Sweeney	Present -Inspector Michelle Sosinski
Mr. Art Thompson	Virtual
Mr. Bryce Tracy	Present
Chief Jon Unruh	Present
Chief Edward Viverette	Present

Also in Attendance:

Kate Jannereth	Jim Jarvis	Danielle Stewart	Greg Farrer
Kathryn Hall	Joni Harvey	Tom Proffitt	Tarek Sasy
Anastasia Ferguson Nelligan	Dennis Fitzpatrick	Korey Rowe	Matt Groesser
Chris Kuhl	Greg Janik	Bryce Alfod	Rob Dale
Max Schnieder	Tim Lee	Kevin Collins	Karl Arriola
Virtual Attendees:	Ray Hasil	Al Mellon	Rob Dale

Pritam Iyer Karl Arriola Dennis Fitzpatrick Nick Carpenter

2. Approval of Meeting Minutes from December 13, 2023 Meeting.

A Motion was made by Mr. Sean McCarthy, seconded by Mr. Gary Hagler and carried to approve the December 13th Meeting Minutes.

3. Approval of Meeting Agenda

A Motion was made by Mr. Brad Stoddard, seconded by Chief Jon Unruh and carried to approve the March 13, 2024 Meeting Agenda as presented.

4. Communications and Correspondence: None

5. 1st Public Comment: None

6. Old Business:

a. Communications Ecosystem Briefings

i. Follow-up on Letter of support from MPSIB regarding USFS Waiver Fees

Brad Stoddard reported about the request from the AUXCOMM Workgroup to provide a letter of support for mitigating fees for their equipment for United States Forestry Service (USFS). He said it took a little time to get it through DTMB management and the Governor's office. It has been sent out to Senator Stabenow's office now. Max added that Ed Hude did receive a copy of the letter, so it went out as Brad has stated.

7. New Business

a. FBI & MSP CJIS Requirements (LEIN Information via LMR) Discussion

i. Bryce Tracy asked everyone to pay attention to the next speaker as best as you can, it's a complex topic. Mr. Kevin Collins will be speaking on behalf of CTIT. Mr. Collins said that he is a 20 plus year employee with MSP, and all with LEIN starting as an auditor and overseeing lead field services. IT Security is also his area. He is here to pull the veil off of radio encryption. Is it required, is it not? Even the FBI didn't want to talk about radio encryption being required. We were surprised with our audit by the FBI. They said that any criminal justice information needs to be secured at 140-2 which is 128bit encryption. There are

2 minor exceptions. 1) voice over cellular 2) microwave point to point line of sight. Getting surprised by that this summer I understand that it spread fast in the community. The other part of that, that goes along with the encryption discussion, is dissemination to authorized agencies. LEIN criminal justice information in general is required to be sent to only authorized agencies. We need to make sure the information is encrypted but only be disseminated to allowed agencies. Their internal audit people tweaked their audits after the FBI audit. We were delinquent in not communicating that, and that it was a requirement. So, if our auditors find agencies out of requirement, they won't take it to a referral, there will be no hounding. We are just requiring a reply that they will comply. That will be all until next cycle which is in three years. It's not an overnight process and it's not cheap. You would think in the last 15 years someone would have talked about it. From his standpoint, encryption & dissemination, how you get there he doesn't care as long as you get to those two points. He met with Brad Stoddard and Bryce Tracy about this to come up with some guidance. Their intention is to get that out to the agencies. Collins asked if there were any questions.

ii. Colonel Raymond Stemitz asked if 128 bits is the standard? Mr. Collins said yes, its 140-2. Stemitz added, what will the equipment impact be? Collins said he is not a radio expert and referred to Bryce/Chris Kuhl. Chris will look that up. Bryce said we know it's not Art480B but the AES 256 is the Feds' standard.

iii. Gary Hagler stated, in terms of dissemination, part of that is eyes on screen, CAD dispatch response, and people in the car. He wonders specifically about overheard voice conversations from people in a patrol car, like cadets, etc. Collins replied, for cadets and interns that are given permission to ride along or work with, they should take security awareness training and sign a non-disclosure agreement. They do not have to be LEIN trained though. For prisoners in a patrol car, those are more difficult. Best answer is to do your best to shield people from that information. If you angle the laptop screen or use a blackout screen those are a good idea.

iv. Brad asked, is there an attempt to get clarification of what they require for encryption? Collins said no, there hasn't been an attempt to ask what is acceptable. That said there has been discussion that maybe 140F2 is not as good. If he knows what the particular encryption is he can ask. We have AES 256 which is part of the Feds. Brad said that we are not the only system in US with statewide LMR, other states would be in the same position. As the representative for the 2000 plus agencies in Michigan, if there is not strong guidance, we can put the matter in our Encryption Workgroup. If anyone has to make investments in that, it's a matter of cost. We want to be sure the workgroup gives them leverage. Bryce said, you mentioned that it's a 3-year cycle and it wasn't defined with the FBI side, but as long as we put a strategy in place. The last thing anyone wants to do is create an unfunded mandate. We

have to work towards a strategy, hopefully their understanding of that and that we are all sharing an expectation. We need to have open lines for communication.

v. Collins said that its fair. He wants to see the 140-2 but the rest is fair. Matt Groesser said, we have been doing a lot of work about transition to whatever compliance would be. For Kent County it's $3.5 million in updates. To Brad's point, it's important to have communication foundation out there early and often from local to federal agencies together. It's going to be really important when government budgets cannot support the costs. Collins said he was glad we have broken the ice on this. We do need to work together and come up with definitive standard and timeline. He will talk with FBI about what is acceptable.

vi. Ray Hasil said that Net Motion has standard data encryption. DES and AES are radio Fips and 140-2 is on data. Chief Viverette said its imperative it be laid out early, but that allows us room to push, and we have a 3 year period to get it out there and push it.

vii. Brad asked, what happens if an agency can't afford the encryption? What happens to that agency? Collins replied that any general violation of some policy, there is a progressive sanctions policy for violations, but the other part is they will keep hounding you for progress. We have to look at other strategies. Brad said he's not sure what we will communicate with users, but we are just a tool for use, based on conversations we've had, we can't mandate encryption. We suggest looping in the FBI, but it's the same problem for every state.

viii. Jim Jarvis said it's a certification standard for a module, but does it perform well in testing? 148 is not the same as 140-2. DES is 56 bit, so triple DES may apply. We look from a standards process and AES 256 is the recommended system. He noticed in the FBI CJIS policy, they have a communication policy, and they have LMR in there. There really aren't details in that. If transmitted outside the boundary, LMR system doesn't fit that. For intrusion detection, someone could tap into your system and listen maybe. There are things in the policy where they forgot LMR. The FBI needs to look at this. He brought this up in CISA a number of times, and he gets the same reply, we don't want to talk about it. With Brad's question, what do we do when agency fails? The roadmap to fix problems is 12 years.

ix. Bryce said that this is a complex topic and he give Collins credit for coming here to talk about it. Frankly, the audits were different for state and local. In his county, none of this was mentioned. So, what he would like to offer is that this Board, asks what other states doing to work on this. He wants to make sure our SWIC is a part of that and to form a workgroup with this Board and the

Encryption Workgroup. He implores the attendees to go to State CJIS and form this group and include the responders in the state that will be impacted. Then come back to our respective authority and boards that are coming up with a plan. If we can somehow do that at a decent pace so when the Feds ask you "what are you doing in Michigan?" we can all be on same page. This can help all of us to create a standard regardless of what system we are on in the future. Does that make sense? Collins said, yes it does. Bryce said that Collins and Brad Stoddard would work with Federal side and Jim Jarvis can help. We need to define what is what and the goal and the financial impacts. We need to take our time and do it right especially at the end-user level. Encryption is not pushing a button and its done. If we do this together, we can meet the expectations of securing. Collins said that made sense.

x. Sean McCarthy said, if we have a plan, we have to have dates. If there is nothing there, his people won't do it. Bryce said we need to take our time on this, come up with a pace to do it before making a strategy. A unified plan strategy will give the feds a goal that we are trying to get to. He thanked Mr. Collins for attending. He said we will reach out to Mr. Collins with that correspondence.

8. Federal Updates

a. CISA Emergency Communications Division – Jim Jarvis, CISA

i. Jim Jarvis said he was going to send an email to the CJIS administration board. The Emerging Communications Division is looking to develop a cyber law enforcement division. In the Communication Tech branch in the command structure, there is radio communications and Brad Stoddard is a member. The other thing is that we have an update to the Public Safety Communications toolkit, it's an active adobe screen and has cityscape and takes you to best practices and one for alert warnings, 911 next generation, etc. It's an interactive tool.

ii. We have funding concerns for Interoperable Communications Technical Assistance program. For rest of the year, CISA will be unable to fulfill requests. Here in Michigan, we have 4 AUXCOMM courses available and a Communications Leader course.

b. FEMA Region 5 RECCWG -Karl Arriola

i. He would like to thank Brad Stoddard for allowing him to present at the NCSWIC Conference. The Wisconsin Hospital Network continue development of the tabletop interoperable exercise occurring Q4 of this year. Thank you to those who helped with final edits of RECWGG report. It will be sent to HQ and then goes to Congress. Actions for FEMA HQ Mt Weather (thank you for Michigan support) led the nation with participation. As for this year 2024 RECCWG plenary

the group voted not to have one this year. In lieu of an in-person plenary they will have a virtual plenary. For the Total Solar Eclipse on April 8, we have high frequency available to augment local agencies. Lastly, for 2025 plans, he did the coordination call with Region 7 and are holding a plenary in Arkansas or other state to be determined. Bryce added that the Republican and Democratic National Conventions are both happening in nearby states so the Interoperable Communications for our neighbors will be intensified. Our AUXCOMM group will be involved.

9. Statewide Updates

a. Statewide Interoperability Coordinator (SWIC) – Brad Stoddard

Brad reported that in February, we held the Statewide Interoperable Communications Conference. We outgrew the space we were in and now we're outgrowing the current space. We had reps from CISA Regional leadership there in a panel. Our counterparts from Indiana came, to learn how we put the conference together. There was a group from Maryland too. We recognize that the content can be a little dry for some, that's always the challenge. If the board has any topics for this conference, let us know. We had a pretty interesting exercise to encourage people to sit with someone you didn't know. We wrote the problem down and had colleagues help with solving it. A number of PSAPs brought a lot of attendees, like Ingham County and others in southeast Michigan. We will make sure next year that it's not at the same time as the 911 Conference in D.C. Overall, the conference was well received. He offered kudos to all the team members that helped from EMHSD and MPSCS. It's not easy and it takes a lot of people and lot of passion. Outside the conference, there were some conversations around technical assistance offerings. It's a bigger impact for other states. At our next meeting, he expects to share some more information. There was a conversation between SWICs and CISA leadership and it was intense. Jim was doing a great job keeping Brad and other SWICs informed.

b. MPSCS System/Budget/Staffing – Kate Jannereth said that back in December 2023 we talked about budget request of $12 million now it's actually $10 million. Staffing of the MPSCS management team is going well. We have only one vacancy. We have 123 out of 137 positions filled.

Brad added that the budget presentation that DTMB has done, when Gov Snyder was in office, it was a statewide lifecycle, it was the first time we replaced equipment. He drew the parallel of MDOT and us. In the last budget it was referenced as critical infrastructure. Since then, at the Senate hearing, there were questions related to the dollar amount of $10 million. But the one question that came up was from Senator Albert. He asked, who all needs towers? He shared that he had asked for this information but didn't get an answer. However, this was the first time we heard it. Our team is working on this information. Parallel also was on radios how many are 10 or 15

years older. We've seen a number of legislators requested tours of MPSCS. He thinks that is a positive. There is an awareness of what the system is. This has well surpassed a billion-dollar network. The last session at the Statewide Interoperable Communications Conference, was about the MSU active shooter and they touted how well their communications worked. That goes to show the success of interoperability. It was a real-life event that brought all kinds of people here. Hopefully all these things culminate to success but still lot of runaway until we find out about our budget. We proposed more than DTMB approved and it's only a 5-year plan and not long term. For example, the towers were 50-year towers, but the concrete wasn't. When we start looking at regular investments, it starts to add up.

c. Agency/County/Member Additions to MPSCS Kate reported that Barry County should go live Fall 2024 and we are replacing our first tower ever in Nashville.

i. **Critical Connect:** Brad said they changed some internal processing like the onboarding piece between Motorola and the carriers. This was originally to connect Indiana and Michigan systems together. At the same time, the resiliency of LMR was written by an FCC official. It touted that LMR isn't going anywhere. Bryce said I'm sure there is security concerns with that. Brad: yes, and the technology is still evolving in that.

d. Current MPSCS Snapshot Data

i. Agencies = 2,230
ii. Radios = 146,963
iii. Dispatch Centers = 126
iv. Dispatch Consoles = 741
v. Computer Aided Dispatch (CAD) consoles = 62
vi. Fire Pagers = 9,486

10. 911 in Michigan

a. Joni Harvey reviewed her report submitted to the board ahead of time. She added the following information. They are working with OHSP office regarding the grants they get every year. We want to see if 911 can have access to that. She has been doing education on it. Connecting the dots on locations information, equipment, and protocols they use and how that connects. Conversation has been going well. She has also been working in Federal 911 office in the department of NHTSA. Also, we have been working the last couple years, trying to get 911 in high schools so students can get certification. Tim Jones in Genesee County is doing an entire program in the schools. Bryce added that there is a Technology Forum. If you have questions contact the State 911 office in Lansing.

11. Workgroup Reports

a. ***Communications Unit Workgroup*** - Co-chairs Ray Hasil and Nick Carpenter. Ray Hasil reviewed his report as submitted to the board ahead of time and added the following. He wants to send kudos to Jerry Becker; he does a fantastic job. He said the workgroup wanted to request a COMT course but there is a hold by CISA on all course requests that require outside instructors. Jim Jarvis added he did a review of requests and Michigan has the most requests for training.

b. ***AUXCOMM Workgroup*** - Co-chairs Max Schneider and Jaclyn Barcroft. Max Schneider reviewed his report as submitted to the board ahead of time. He added that there will be training in Escanaba on April 13-14.

c. ***Public Alerting Workgroup*** - Co-chairs Jaclyn Barcroft and Rob Dale. Rob Dale reviewed their report submitted ahead of time to the board.

d. ***Fire Paging Workgroup*** - Co-chairs: Al Mellon & Greg Janik – Chief Janik reviewed the report submitted to the board ahead of time. He added that he networks with Greg Farrer, Chris Kuhl, and Al Mellon and they have 241 systems.

e. ***Encryption Workgroup*** - Co-chairs: Tim Jones & Matt Groesser - Chris Kuhl reviewed the report submitted to the board ahead of time. He added that the workgroup has new members from Manistee. He will be attending the Region 21 Frequency Advisory Committee on March 14.

f. ***Security Workgroup*** - Co-chairs: Capt. Kevin Sweeney & Brad Stoddard -Brad Stoddard reviewed their report submitted to the board ahead of time.

g. ***UASI Workgroup*** - Co-chairs: Craig Swenson & Sean McCarthy. Craig Swenson said that Jim Jarvis already covered what he would have said. He added that the workgroup is spending time on the biggest upcoming concern for MPSCS. Getting procedures in place for users of the system is important.

12. 2nd Public Comment:

a. Craig Swenson said that he is still a little confused about the new encryption information. He doesn't understand what information we are trying to protect. Is it nuclear codes? He thinks it's stupid that all radios in the country will be encrypted. It's just ridiculous. He thinks the Board should push back. If this was just about inefficiency of government, there are few problems he couldn't solve. But it isn't, it's about first responders going into schools for active shooters. Did we forget 9/11 and interoperability? It's about communication. Bryce thanked him for his comments and

said he will always protect and promote interoperability. Its why this Board is here. The only thing we can do to push back is to stand united with this. We are making progress, and we all have to have patience and listening skills to make that step. This is what 9/11 brought to the forefront. We have to stand together as a state. We have not made decisions or put out a mandate, we will be a part of that progress. If anyone has further comments, please reach out to him or another Board member.

b. A member of the public added, he agrees with Craig Swenson. He understands the need for this, but at the end of the day it requires money. There is no quick fix. One thing remains, is that radios get old and need to be replaced. A lot of municipalities are struggled to just buy radios. The goal should be when replacing radios then update the encryption. This is a solution to achieve this goal, it happens when you replace a radio. Interoperability is the main thing. He thinks everyone needs to hear each other. If we do this, we have to do one goal for all: replacement then integration.

13. **Good of the Order** -Bryce said that we need to keep our listening ear open and our minds open. We take the time to understand and then we move forward. He thanked the board and public for attending the meeting.

Adjournment: The meeting adjourned at 3:55pm.