



**METROPOLITAN EMERGENCY SERVICES BOARD
EXECUTIVE COMMITTEE MEETING AGENDA**

February 9, 2022, 10:00 a.m.

WebEx Meeting: [Meeting Link](#)

Phone Number: (408) 418-9388

Access Code: 2558 615 0139

Password: BdFDScvG223 (23337284 from phones & video systems)

1. **Call to Order** – Board Chair, Commissioner Irene Fernando
2. **Approval of Agenda** – Commissioner Fernando
3. **Oath of Office** (if needed) – Commissioner Fernando
4. **Approval of December 8, 2021 Executive Committee Minutes (page 3)**
5. **Radio Items** – Tracey Fredrick, Radio Services Coordinator
 - A. Approval of Amendment to Scott County's ARMER Participation Plan (**page 9**)
6. **9-1-1 Items** – Mike Mihelich, 9-1-1 Manager – none
7. **EMS Items** – Ron Robinson, EMS Coordinator – none
8. **Administrative Items** – Jill Rohret, Executive Director
 - A. Discussion: Legislative Initiative for ARMER Encryption (**page 11**)
9. **Old Business** – None
10. **New Business** – None
11. **Adjourn**



**METROPOLITAN EMERGENCY SERVICES BOARD
EXECUTIVE COMMITTEE MEETING AGENDA**

February 9, 2022, 10:00 a.m.

Metropolitan Emergency Services Board Members

Anoka County

Commissioner Mike Gamache*
Commissioner Mandy Meisner

Carver County

Commissioner Gayle Degler*
Commissioner John Fahey

Chisago County

Commissioner Richard Greene*

City of Minneapolis

Council Member Andrew Johnson*

Dakota County

Commissioner Joe Atkins* (2021 Chair)
Commissioner Mary Hamann-Roland

Hennepin County

Commissioner Irene Fernando* (2021 Vice Chair)
Commissioner Chris LaTondresse

Isanti County

Commissioner Greg Anderson* (2021 Secretary)

Ramsey County

Commissioner Trista MatasCastillo* (2021 Treasurer)
Commissioner Jim McDonough

Scott County

Commissioner Dave Beer
Commissioner Tom Wolf*

Sherburne County

Commissioner Felix Schmiesing*

Washington County

Commissioner Wayne Johnson
Commissioner Fran Miron*

*Denotes Executive Committee member

METROPOLITAN EMERGENCY SERVICES BOARD

EXECUTIVE COMMITTEE MEETING MINUTES

December 8, 2021

Commissioners:

Greg Anderson, Isanti County
Joe Atkins, Dakota County – **absent**
Gayle Degler, Carver County
Irene Fernando, Hennepin County
Mike Gamache, Anoka County
Rick Greene, Chisago County

Andrew Johnson, City of Minneapolis
Trista Matascastillo, Ramsey County – **absent**
Fran Miron, Washington County
Felix Schmiesing, Sherburne County
Tom Wolf, Scott County

Staff Present: Tracey Fredrick, Mike Mihelich, Jill Rohret, and Martha Ziese.

Guests Present: Jay Arneson, *Board Counsel*; and Melissa Wenzel, *LifeLink III*

1. Call to Order:

The meeting was called to order at 10:00 a.m. by MESB Vice-Chair Commissioner Irene Fernando.

2. Approval of the December 8, 2021 Agenda

Motion made by Commissioner Degler, seconded by Commissioner Wolf to approve the December 8, 2021 MESB Executive Committee agenda. Motion carried.

3. Approval of Minutes

Motion made by Commissioner Miron, seconded by Commissioner Wolf to approve the June 9, 2021 MESB Executive Committee minutes. Motion carried.

4. Radio Items

A. Approval of Amendment to Minneapolis' ARMER Participation Plan

Tracey Fredrick said Minneapolis requests approval of an amendment to its ARMER participation plan to accommodate changes related to its new backup dispatch site at the Minneapolis Convention Center. The work is expected to be completed by the end of this year or very early into 2022. The Land Mobile Radio and NG91-1 Committees have approved this plan. Minneapolis also received a temporary variance to use this center prior to the board approval so it can be used, if needed, for the Potter trial.

Motion made by Councilmember Johnson, seconded by Commissioner Wolf to recommend approval of the amendment to Minneapolis' ARMER participation plan. Motion carried.

B. Approval of Request for Waiver to SECB Standard IOP-11 from Eagan Fire Department

Fredrick said Eagan Fire Department requests approval of a waiver to SECB Standard IOP-11 for one additional radio used by an Eagan Firefighter who also serves on the SWAT team. It is not for day-to-day use and will only be used for SWAT operations. There are two other SWAT team members that have similar approved waivers.

Commissioner Greene asked what would keep them from using that radio for use other than a SWAT operation.

Fredrick said this radio is kept in a locked locker when not in use for SWAT operations.

METROPOLITAN EMERGENCY SERVICES BOARD

Commissioner Gamache asked if there have been any similar requests from agencies besides Eagan Fire Department and if this request requires county board approval.

Fredrick said she did not know of any other requests from other counties. This request came through the Radio TOC for approval since it is a state standard. This individual is an EMS Medic that works for the Eagan Fire Department and appointed to the SWAT team by the Dakota County Sheriff's Department.

Commissioner Fernando asked if there was an expiration date for this activation.

Fredrick said if there is a desire for a review, she will do a review in one year.

Councilmember Johnson asked if this was a technicality since this radio would be locked up when not being used for SWAT operations.

Fredrick said that is correct; this individual has a separate radio for daily use/non-SWAT operations.

Jill Rohret said the radio system administrators regularly monitor interoperability talkgroups and can see if there is inappropriate use.

Motion made by Commissioner Gamache, seconded by Commissioner Degler to recommend approval of Eagan Fire Department's request for waiver to SECB Standard IOP-11. Motion carried.

C. Approval and Acceptance of FY2022 SECB Grant

Fredrick said staff requests acceptance of the FY2022 SECB grant. The grant is in the amount of \$250,000.00 and will focus on mental health statutory compliance training, telecommunicator resiliency training, ECN conference attendance, ARMER training video and PSAP security audits.

Fredrick said if there were any changes to these priorities it would come before the board for approval. It is likely the grant contract will be received in early 2022.

Motion made by Commissioner Miron, seconded by Commissioner Degler to recommend acceptance of the 2022 SECB grant. Motion carried.

5. 9-1-1 Items

A. Approval of CHS-1 Purchase/Upgrade Agreement

Mike Mihelich said Call Handling System 1 (CHS-1) is 9-1-1 answering system used by five metro PSAPs, which would like to proceed with purchasing a system upgrade. This system has been in existence for five years. There are some issues with the operating systems of the servers and the machines that are outdated. The machines have been running 24/7 for those five years and are due for a refresh. The MESB is the contract manager for CHS-1 and is therefore a signatory for the agreement.

Rohret said the system owners would like to take advantage of a pricing offer which expires December 31, 2021. Because of this, this item is before the Executive Committee today for approval with ratification by the board in January.

Motion made by Councilmember Johnson, seconded by Commissioner Degler to bring approve of the CHS-1 Purchase/Upgrade Agreement. Motion carried.

METROPOLITAN EMERGENCY SERVICES BOARD

B. Approval of Amendment 1 to the Winbourne Consulting Agreement

Mihelich said Winbourne Consulting is offering a “lessons learned” document they have put together from all of their national CAD-to-CAD work. The cost for this document is \$1,320.00. The Workload Sharing/Situational Awareness Workgroup feels this document would be beneficial in detailing best practices for implementing a CAD-to-CAD interoperability solution.

Motion made by Councilmember Johnson, seconded by Commissioner Wolf to recommend approval of Amendment 1 to the Winbourne Consulting Agreement. Motion carried.

6. EMS Items

A. Approval of Contract for Certified Ambulance Documentation Specialist Class

Rohret said this class was included in the EMS EMSRB work plan approved earlier this year. Because this contract requires a signature over the Executive Director’s signing authority of \$10,000.00 it is brought to the board for approval. In this case, a deposit is required to secure dates for the class. Because of this, this item was noticed for approval by the Executive Committee with ratification by the Board in January.

Motion made by Commissioner Wolf, seconded by Councilmember Johnson to approve the contract for Certified Ambulance Documentation Specialist Class. Motion carried.

7. Administrative Items

A. Approval of 2022 MESB Legislative Agenda

Rohret said MESB staff and the lobbyists developed the draft 2022 legislative agenda. There several items which have been on the legislative agenda for years.

Rohret said under 9-1-1 and ARMER items is the funding for counties’ ongoing maintenance of GIS data. DPS is proposing technical amendments to MS 403. MESB staff recommend supporting the change to employment classification of 9-1-1 telecommunicators.

Rohret said long-term sustainable funding for EMS regions remains on the draft legislative agenda. A one-time appropriation was approved in 2021, but a long-term solution is needed. Seat belt fines have declined. There is some clarification needed for grant funding requirements under MS 144E.02 and 144E.50. The EMSRB made some changes this year which resulted in three grants instead of two. A longstanding legislative agenda item is keeping the EMS regional program under the EMSRB rather than moving it to Minnesota Department of Health.

Commissioner Degler asked if it’s a concern that stopping drivers for smaller offenses will have an effect on the EMS funding money.

Rohret said it has not been brought up, but it is a logical assumption it will have an effect on the EMS funding streams, particularly the grant funded seatbelt violation fines.

Commissioner Fernando said this is a big concern. What is the best way for our IGRs to support these platforms.

Rohret said once this legislative agenda is approved in January, she will send out to counties for awareness.

Commissioner Gamache said it would be helpful to have the breakdown of EMS funding sent out to the counties with the approved legislative agenda.

METROPOLITAN EMERGENCY SERVICES BOARD

Motion made by Commissioner Degler, seconded by Councilmember Johnson to recommend approval of the draft 2022 MESB Legislative Agenda. Motion carried.

B. Discussion: Proposed Amendments to MS 403

Rohret said since the Board last discussed the proposed technical amendments to MS 403, three additional changes were made. Regions were requested to discuss the changes and bring feedback to the SECB Legislative Committee. The first change is the language relating to Originating Service provider cost recovery has been restored per advice of Minnesota Management and Budget.

Rohret said the second change is the language related to requirements for multi-line telephone system vendors was mistakenly removed and is now added back in.

Rohret said the third change is in the area of the 9-1-1 fee itself; references to FCC rules for the use of 9-1-1 fee monies were added where appropriate.

C. Discussion: 2023 Budget – Radio Training

Rohret said that the MESB has traditionally used grant funds, either federal SHSP grants or state SECB grant, to pay for radio system administrator training. ECN has made some changes to how the SECB grant may be used; radio items are no longer eligible uses for the SECB grant funds. there have been some changes to grant funds related to radio training. The SECB grant guidance now states radio items, including training will no longer be eligible for funding. MESB staff wanted to discuss whether additional funds, likely \$30,000.00 - \$35,000.00 should be added to the radio administration budget for the 2023 budget to accommodate regional training needs. She prepared an example using the approved 2022 budget so members could see how this addition to the budget would affect assessments.

Fredrick said it has not been possible to hold these radio trainings, even though regular training is required in SECB standards. The metro region ARMER system administrators have expressed concern about not staying in compliance with state standard, as they are required to have a training every two years. The metro system administrators are very advanced and want to stay on top of current trends and changes made by the system vendor during system updates/upgrades.

Commissioner Gamache said trainings are being missed. It is important to stay up-to-date. The focus should be on changing statute. Is there a communication issue that we need to correct to see what trainings counties are conducting.

Fredrick said she can easily track the trainings that are being held, including the state's online training.

Commissioner Degler asked if we could find out by county each county would be using the training.

Fredrick said she will look for that information and present at the January board meeting.

8. Old Business – None

9. New Business

Commissioner Fernando said as the 2022 MESB Chair she would welcome discussions on in - person meetings.

10. Adjournment

METROPOLITAN EMERGENCY SERVICES BOARD

Motion made by Commissioner Degler, seconded by Commissioner Wolf to adjourn. Motion carried.

The meeting adjourned at 11:04 a.m.

DRAFT



METROPOLITAN EMERGENCY SERVICES BOARD

Meeting Date: February 9, 2022
Agenda Item: 5A. Approval of Amendment to Scott County Participation Plan
Presenter: Fredrick

RECOMMENDATION

The Radio Technical Operations Committee recommends the Executive Committee recommend approval of the amendment to the Scott County ARMER participation plan.

BACKGROUND

Scott County has been an ARMER participant since 2005. It currently utilizes a full ARMER participation plan with DPS-ECN.

ISSUES & CONCERNS

Scott County requests approval of an amendment to its ARMER participation plan to relocate its network backhaul to the Norwood site from the Shakopee site.

MnDOT allocated to Scott County dark fiber pairs on the Carver County ring for the Norwood site. This connection will provide redundancy for several Scott County sites and the PSAP.

MnDOT reviewed this plan and supports it, pending MESB approval.

FINANCIAL IMPACT

None to MESB.

MOTION BY:
SECONDED BY:
MOTION:

PASS/FAIL



Scott County Sheriff's Office

LUKE W. HENNEN, SHERIFF

December 6, 2021

Tracey Fredrick
Metropolitan Emergency Services Board
2099 University Avenue West
St. Paul, MN 55104

ARMER Participation Plan Amendment

Dear Tracey,

Scott County is requesting approval for the following modification to our ARMER participation plan.

Scott County has been allocated a pair of dark fiber on the Carver County fiber ring to the MNDOT Norwood site. This dark fiber will provide redundancy for 5 Scott County subsites and Dispatch site. The Carver County fiber will interface at the Scott County LEC and Shakopee site.

With approval, Scott County request a network change for 6 T1 circuits currently interface at the Shakopee site be relocated to drop at the Norwood site on the south loop ARMER backhaul. MNDOT has approved this plan change on the ARMER backhaul route.

Sincerely,
Nick Schatz
Radio System Administrator
(952) 496-8889
nschatz@co.scott.mn.us



METROPOLITAN EMERGENCY SERVICES BOARD

Meeting Date: February 9, 2022
Agenda Item: 8A. Discussion – Legislative Initiative for ARMER Encryption
Presenter: Rohret

RECOMMENDATION

None, this is discussion item only.

BACKGROUND

When the ARMER system was first deployed in late 2002, encryption was rarely, if ever used. After-action reviews from the 2008 Republican National Convention in St. Paul indicated that law enforcement agencies in particular should begin to implement some encrypted talkgroups. Since then, local system administrators implemented some encrypted talkgroups on their systems, though the type of encryption has varied. In the 2010s, the SRB/SECB created some statewide encrypted interoperability talkgroups for law enforcement use.

Over the last three years, several metro local subsystems have migrated to encrypted talkgroups for law enforcement.

ISSUES & CONCERNS

In the fall of 2021, the Minnesota Bureau of Criminal Apprehension (BCA) released new rules regarding communicating criminal justice information (CHI) obtained from the Criminal Justice Data Communications Network (CJDN). New FBI rules, which the BCA decided to implement in Minnesota, require the use of AES encrypted resources to transmit criminal justice information.

AES is the highest form of encryption and is not widely in use in Minnesota. Most Minnesota ARMER users will have to purchase AES encryption or upgrade their radios to support AES encryption. Additionally, additional ARMER infrastructure components must be purchased and installed to accommodate the widespread use of AES encryption. Additionally, standards regarding encryption keys must be developed and approved. The cost to implement AES encryption across Minnesota is not yet known, though it will be quite high. Because of this, it will be difficult to get all ARMER participants to migrate to encryption in an agreed upon time frame.

Because of this, the BCA has indicated that it would not immediately require the use of encryption to meet the FBI's rules.

Due to the large state surplus and presence of federal dollars, an initiative is being discussed by local ARMER system administrators to make a request of the state legislature for funding to

MOTION BY:
SECONDED BY:
MOTION:

PASS/FAIL



METROPOLITAN EMERGENCY SERVICES BOARD

Meeting Date: February 9, 2022
Agenda Item: 8A. Discussion – Legislative Initiative for ARMER Encryption
Presenter: Rohret

purchase the required ARMER infrastructure components and to provide a grant to local ARMER users to purchase encryption or new radios which support encryption.

The SECB Finance Committee is taking the lead on getting information from each region to determine the extent of cost related to ARMER subscriber equipment (mobile and portable radios).

The MESB Executive Director thinks the MESB should support and participate in such efforts to secure funding for ARMER encryption.

FINANCIAL IMPACT

None to the MESB, but ARMER encryption will be a cost for all metro ARMER law enforcement users (and possibly other public safety users due to interoperability). Some users may be planning for this, but others will not.

MOTION BY:
SECONDED BY:
MOTION:

PASS/FAIL



CJDN Network Security

Version: 10/03/2021

Document Number: MNJIS-5002

Distribution: BCA

Policy Statement / Objective:

The Bureau of Criminal Apprehension's (BCA) Minnesota Justice Information Services (MNJIS) operates the Criminal Justice Data Communications Network (CJDN) so that authorized agencies can retrieve and submit criminal justice information (CJI) to BCA systems and services to perform their duties.

This policy sets statewide standards regarding the security and movement of CJI within Minnesota, including security of the CJDN by providing specific guidance for meeting FBI [CJIS Security Policy](#) (CSP) requirements. The CJIS Security Policy provides the minimum level of information technology (IT) security requirements acceptable for the transmission, processing, and storage of the nation's Criminal Justice Information System (CJIS) data.

Any security controls listed in this policy that are more restrictive than the CJIS Security Policy are noted in ***bold and italics***. These controls are detailed in the BCA CJDN Security Policy – Directive.

Definitions:

Authorized agency: A government agency authorized by statute to have access to BCA and FBI resources with a valid joint powers agreement or other contract executed by it and the BCA. Used interchangeably with Local Agency.

BCA: The CJIS Systems Agency (CSA) and State Identification Bureau (SIB) for Minnesota.

CJI Environment (CJE): an authorized agency's isolated infrastructure where CJI is processed, stored, or transmitted and access to environments is controlled. This includes, but is not limited to, network switches, routers, firewalls, workstations, mobile devices, servers, and virtual environments.

Criminal Justice Information (CJI): Criminal Justice Information means all FBI CJIS provided data necessary for authorized agencies to perform their duties, including data contained in or derived from data maintained by the BCA that have restricted dissemination standards under state or federal statute, BCA systems that frequently contain or provide CJI include Portals XL, LEMS, the Criminal History System (CHS), Predatory Offender Registry (POR) System, and other systems listed in the BCA Data Inventory.

Criminal Justice Data Communications Network (CJDN): For statutorily authorized users, the CJDN is a connectivity method approved by the BCA and defined in Minnesota Statute 299C.46

Local Agency: A Minnesota government agency authorized by statute to have access to BCA and FBI resources with a valid joint powers agreement or other contract executed by it and the BCA Used interchangeably with Authorized Agency.

Local Agency Terminal Agency Coordinator (TAC): The point-of-contact at the local agency for matters relating to CJIS and BCA information access. The TAC administers CJIS and BCA systems programs within the local agency and oversees the agency's compliance with the FBI CJIS Security Policy, NCIC Operating Manual, BCA CJDN Security Policy, BCA Appropriate Use of Systems and Data policy, the BCA FBI CJIS Audits, Audit Compliance, and Audit Sanctions policy, and other FBI and BCA policies.

Terminal: any device used by a Local Agency to connect to the CJDN to retrieve CJI. Examples of a MNJIS Terminal include, but are not limited to, a desktop computer, laptop, tablet, and cellular telephone.

Physically Secure Location: A Physically secure location is a facility, an area, a room, or a group of rooms, that is/are subject to authorized agency management control and which contain hardware, software, and/or firmware (e.g. information system servers, controlled interface equipment, associated peripherals or communications equipment, wire closets, patch panels, etc.) that provide access to the CJDN network or the CJE. Physical security perimeters must be acceptable to the state CJIS Systems Officer (CSO).

Policy:

This policy addresses the secure operation of computers, access devices, circuits, hubs, routers, firewalls, and other components that support a data network, telecommunications network and related MNJIS systems used to process, store, share, or transmit CJI, guaranteeing the priority, integrity, availability, and security of service needed by state and local agencies.

This policy also applies to CJI data held by authorized agencies, regardless of the means of storage.

Roles and Responsibilities:

A. CJIS System Agency Information Security Officer (CSA ISO)

The CSA ISO is a BCA employee who, in addition to the responsibilities described in the CJIS Security Policy, is responsible for:

1. Ensuring agencies conform to the CJIS Security Policy and BCA policies related to the security and compliance of systems and connections to the CJDN and/or the access, transmission, or processing of CJI.
2. Ensuring management controls are in place for the CJDN including the management of State routers, firewalls, and VPN devices.
3. Ensuring that state and local agency network topology documentation is current.
4. Supporting security-related configuration management for the BCA and Local Agencies.
5. Disseminating security-related training materials to local agencies.
6. Ensuring the completion of technical security and compliance audits for all agencies who access the CJDN and/or CJI.

B. Local Agency Security Officer (LASO)

Each head of a local agency, whether criminal justice or non-criminal justice, that accesses CJI, must appoint a Local Agency Security Officer (LASO) for the agency. The LASO, is the liaison between the Local Agency and the CSA ISO. The LASO is responsible for ensuring that the agency complies with both the CJIS Security Policy, this policy and the BCA SJIS Security Policy Directive. In addition to responsibilities outlined in the CJIS Security Policy, the LASO is responsible for:

1. Ensuring that personnel security screening procedures are being followed as stated in the CSP in coordination with the agency's Terminal Agency Coordinator (TAC) or Point of Contact.
2. Ensuring the physical security of all terminals and equipment in the authorized agency's environment that access the CJDN or contain CJI
3. Ensuring network compliance with the CJIS Security Policy.
4. Establishing procedures for documenting, maintaining, and updating their agency's criminal justice information network configuration and required policies.

Enforcement and Security

C. Standards of Enforcement

1. Each Local Agency is responsible for enforcing system security standards and incident response procedures for their agency in addition to any other agencies or entities for which the Local Agency provides CJI data or services.

2. Local Agencies must have written policies to address the security provisions of the CSP and this policy. Local Agencies must have procedures in place to deactivate the accounts, passwords, and other access tools of separated employees.
3. Authorized users may access CJIS systems and disseminate CJI only for the purposes for which they are authorized. Each authorized agency permitted access to FBI CJIS and BCA systems will be held to the provisions of the policies and guidelines set forth in this policy as well as the most current version of the CJIS Security Policy.

D. Personnel Security

1. The CJIS Security Policy requires that any individual with unescorted access in a physically secure location must have a national, fingerprint-based background check and complete appropriate security awareness training. Most individuals will take the security awareness training via the BCA's Launch Pad (<https://bcanextest.x.state.mn.us/launchpad/>). Access to these sites is restricted; access is granted by the TAC. As part of the training, individuals will be tested as required by the CSO. Each agency is responsible for ensuring each employee is current with security awareness training.
2. Once the individual has met the requirements, they can have unescorted access to any part of the agency's physically secure location where there are devices through which CJI can be accessed or where output from those devices can be found in any media (e.g. paper, electronic or other physical format).
3. Individuals who do not need to move freely within a physically secure location must be escorted at all times by an individual who has met these personnel security requirements.

E. Personnel Screening for Contractors, Vendors, and Governmental Agencies Performing Criminal Justice functions on Behalf of an Authorized Agency

As an alternative to agencies screening vendors themselves, the BCA offers an optional Vendor Screening Program to register private vendors whose employees support Authorized Agencies in Minnesota. Vendors will be registered after the BCA determines that the vendor is acting in compliance with the CJIS Security Policy and this policy, commits to maintaining compliance, and has signed a Security Addendum with the BCA. For vendors who participate in this program, the BCA will conduct all national fingerprint-based background checks on vendor employees who may have access to CJI and will be the centralized repository for the documentation of security awareness training and testing for those employees. Information on the process is available from the BCA CJIS SAT Screening Unit, BCACJISSATScreening@state.mn.us

F. Incident Response

1. The CJIS Security Policy requires that Local Agencies report a computer security incident, whether physical or logical, to the FBI via the CSA ISO. Local Agencies are required to have a policy and procedure regarding computer security incidents and how they are reported. Local Agencies should use NIST Special Publication 800-61 as a template for the required incident response policy. The NIST publication can be found at: <http://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.800-61r2.pdf>
2. The Local Agency must report all suspected security incidents to the CSA ISO within 24 hours of the initial discovery. Computer security incidents include loss or theft of media containing CJI (e.g. paper, thumb drive), suspicious or malicious software in the Local Agency's environment or unusual network activity. Computer security events and weaknesses associated with information systems must be communicated in a manner allowing timely corrective action to be taken. Formal event reporting and escalation procedures, depending on the severity of the situation, must be in place.
3. All employees, contractors and third party users must be made aware of the procedures for reporting the different types of events and weaknesses that might have an impact on the security of agency assets and are required to report any computer security events and weaknesses as quickly as possible to the designated point of contact.

Technical Security Standards

Local Agencies must follow the technical security standards found in the CJIS Security Policy Standards Directive for their agency and any other agencies or entities for which the Local Agency provides CJI data or services.

References:

1. FBI CJIS Security Policy
2. NIST Computer Security Incident Handling Guide Special Publication 800-61
3. NIST Recommendations for Implementation of Cloud Computing Solutions
4. NIST Guidelines for Media Sanitization Special Publication 800-88
5. FBI Recommendations for Implementation of Cloud Computing
6. FBI Cloud Control Catalog



CJDN Security Policy Standards Directive

Contents

Introduction	7
Account Administration	8
User Accounts	8
Network and Service Accounts	8
Advanced Authentication	8
Application Development	8
Application and Application Programming Interface (API) Coding	8
Application Logging	9
Application Code Scanning	10
DAST tools used by the agency should identify severity ratings for vulnerabilities using the CVSS.Application Code Vulnerability Remediation	10
BCA Systems and Data Access	10
Camera Guidance (Body, Squad, Surveillance)	10
Cloud	11
Cloud Security	11
Conferencing (Audio, Video)	11
Employees, Vendors and Contractors	11
Encryption	11
Faxing (Digital)	11
Firewalls	12
Logging	12
Multifunction Devices and Printers	12
Radio Traffic	12
Soft Phones	12
Virtual Private Network (VPN)	12
Vulnerability Remediation and System Updates	13
Wireless Networks	13
Appendix A – Supporting Information for Cloud Services	14
Ensuring cloud vendor security and compliance with the FBI CJIS Security Policy	14
Agency responsibility for ensuring security and compliance	14
Microsoft cloud services	14
Amazon Web Services (AWS)	14
Cloud Networking – Cisco Meraki	15

Introduction

As the CJIS Systems Agency (CSA) for the State of Minnesota, the Bureau of Criminal Apprehension (BCA) is responsible for ensuring that all criminal justice and non-criminal justice agencies in Minnesota that access criminal justice information (CJI) comply with FBI CJIS Security Policy requirements.

The FBI CJIS Security Policy provides agencies with a minimum set of security requirements for access to FBI Criminal Justice Information Services (CJIS) systems and information. As a supplement to the FBI CJIS Security Policy, the BCA has developed these additional standards for the protection of criminal justice information and systems in Minnesota.

This directive will be reviewed and updated as necessary at least every six months.

Account Administration

User Accounts

- Agency must have a documented process for validating user identities before unlocking any accounts that may provide access to CJI.

Network and Service Accounts¹

- Network and Service Account passwords shall be a minimum of twenty (20) characters in length including at least one of each of the following:
 - special character
 - number
 - upper case character
 - lower case character
- If the agency uses a Privileged Account Management (PAM) tool, these accounts shall be managed using the tool and changed at minimum every 90 days.
- If the agency does not use a PAM tool, a documented process must be used to manage these accounts and the passwords will be changed at minimum every 6 months.

Advanced Authentication²

- Access to the CJDN from a location that is not physically secure must use advanced authentication and encryption.
- The infrastructure for advanced authentication must be on an isolated network, not part of the CJDN or an agency user network.
- Biometrics may not be used as a second factor of authentication on mobile devices.
- CJI access in a cloud environment must use a government cloud, as well as advanced authentication and encryption.

Application Development

Application and Application Programming Interface (API) Coding³

- Agencies must implement the practices in FBI CJIS Security Policy Appendix G.8 and as outlined below when developing any applications or application integrations that access, transmit, process, or store CJI. These practices must be followed by all agency staff, including employees and contractors, involved in application architecture, design, develop, or testing.
- Security Controls: Using a set of standard security controls greatly simplifies the development of secure applications and APIs. The OWASP Top Ten Proactive Controls 2018 is a list of security techniques that should be included in every software development project. They are numbered in order of importance (i.e., #1 being most important):
 - C1: Define Security Requirements
 - C2: Leverage Security Frameworks and Libraries
 - C3: Secure Database Access
 - C4: Encode and Escape Data
 - C5: Validate All Inputs
 - C6: Implement Digital Identity
 - C7: Enforce Access Controls
 - C8: Protect Data Everywhere
 - C9: Implement Security Logging and Monitoring

¹ FBI CJIS Security Policy Appendix G.5

² FBI CJIS Security Policy Section 5.5.6, 5.6.2.1.2, 5.6.2.2, 5.6.2.2.1, and 5.13.7.2

³ FBI CJIS Security Policy Appendix G.8

- C10: Handle All Errors and Exceptions
- For more details see:
 - https://www.owasp.org/index.php/OWASP_Proactive_Controls
 - https://www.owasp.org/index.php/OWASP_Cheat_Sheet_Series

Application Logging

Custom-developed applications must log the following events:

- Input validation failures (e.g., protocol violations, unacceptable encodings, invalid parameter names and values)
- Output validation failures (e.g., database record set mismatch, invalid data encoding)
- Authentication successes and failures
- Authorization (access control) failures
- Session management failures (e.g., cookie session identification value modification)
- Application errors and system events (e.g., syntax and runtime errors, connectivity problems, performance issues, third party service error messages, file system errors, file upload virus detection, configuration changes)
- Application and related system start-ups and shut-downs
- Logging initialization (starting, stopping or pausing)
- Use of higher-risk functionality, such as:
 - network connections
 - addition or deletion of users
 - changes to privileges
 - assigning users to tokens
 - adding or deleting tokens
 - use of systems administrative privileges
 - access by application administrators
 - all actions by users with administrative privileges
 - access to payment cardholder data or criminal justice data
 - use of data encrypting keys
 - encryption key changes
 - creation and deletion of system-level objects
 - data import and export (including screen-based reports)
 - submission of user-generated content – especially file uploads
- Legal and other opt-ins, such as:
 - permissions for mobile phone capabilities
 - terms of use
 - terms and conditions
 - personal data usage consent

All application logs must be stored for one year.

All application logs must be reviewed weekly for anomalies. Automated anomaly review using a security information and event management (SIEM) tool may substitute for the manual weekly review.

Each log entry must include sufficient detail to identify “when, where, who, and what” for each event. For more detail, reference the OWASP Logging Cheat Sheet, below.

https://cheatsheetseries.owasp.org/cheatsheets/Logging_Cheat_Sheet.html

Application Code Scanning

Static Application Security Testing (SAST)

SAST analyzes source code without executing the application to identify any vulnerabilities.

- SAST must be performed on any custom-built applications that will access, transmit, process, or store CJ before the application is deployed to production and during any major updates or upgrades.
- SAST tools used by the agency should identify severity ratings for vulnerabilities using the Common Vulnerability Scoring System (CVSS).

Software Composition Analysis Testing (SCA)

- SCA must be performed on any custom-built applications that will access transmit, process, or store CJ before the application is deployed to production and during any major updates or upgraded.
- SCA tools used by the agency should identify severity ratings for vulnerabilities using the CVSS.

Dynamic Application Security Testing (DAST)

DAST tests an application when it is running to discover run-time and environment-related security issues.

- DAST must be performed on all applications, [custom-developed and commercial off-the-shelf (COTS)] before the application is placed into production and during any major updates or upgrades.

DAST tools used by the agency should identify severity ratings for vulnerabilities using the

CVSS.Application Code Vulnerability Remediation

- Agencies and their vendors must use the standards outlined below to remediate any vulnerabilities identified during code scanning for both custom-developed and COTS applications that access, transmit, process, or store CJ.
- Using the Common Vulnerability Scoring System (CVSS), agencies and their vendors must remediate vulnerabilities as follows:
 - **Critical – Remediate within 7 days.** These vulnerabilities pose the highest risk to applications, systems, and agency data.
 - **High – Remediate within 30 days.** These vulnerabilities pose a significant risk to applications, systems, and agency data.
 - **Medium– Remediate within 90 days.** These vulnerabilities pose a moderate to indirect risk to applications, systems, and agency data.
 - **Low – Remediate during the next routine system maintenance.** These vulnerabilities only expose non-critical system information.

BCA Systems and Data Access

BCA systems and data may be accessed via:

- the BCA's Criminal Justice Data Communications Network (CJDN), or
- a VPN connection that meets the FBI CJIS Security Policy and BCA CJDN Security Policy requirements for encryption of data in transit, including disabling all compromised cipher suites and operating devices in FIPS Mode.

Camera Guidance (Body, Squad, Surveillance)

- Video files are not considered criminal justice information. Any CJ captured in these files is considered incidental. Neither the FBI nor BCA has requirements related to cameras or video files.
- MN Statutes §13.825 subd. 11(b) requires portable recording system vendors storing data in the cloud to “protect the data in accordance with the security requirements of the United States Federal Bureau of Investigation Criminal Justice Information Services Division Security Policy 5.4 or its successor version.”

Cloud

Cloud Security⁴

- Storage of CJJ, regardless of encryption status, **is permitted only in government cloud environments** which reside within:
 - the physical boundaries of the U.S., U.S. territories, Indian Tribes, and Canada, and
 - the legal authority of an FBI Advisory Policy Board (APB) member agency (i.e., U.S. – federal/state/territory, Indian Tribe, or the Royal Canadian Mounted Police (RCMP)).
- Any cloud vendor employees with access to unencrypted CJJ or encryption keys for encrypted CJJ must:
 - reside within the U.S., U.S. Territory, Indian Tribe, or Canada, and
 - perform all work from the same
- Encryption keys should be managed by the agency and must be rotated at least yearly.
- If encryption keys cannot be managed by the agency, the agency’s vendor agreement must limit vendor employee access to keys and specify related vendor responsibilities.

Conferencing (Audio, Video)

Audio and video conferencing systems used for transmitting or storing CJJ must comply with all FBI CJIS Security Policy and CJDN Security Policy requirements for encryption at rest and in transit.

Employees, Vendors and Contractors

- Agency will not hire or contract with any person not physically present within an APB-member country for work related to any system that will access, transmit, process, or store CJJ.
- Any employee, contractor, or vendor employee must:
 - be a resident of an APB-member country, and
 - submit to a fingerprint-based state of residence and national fingerprint check with no disqualifying responses.

Encryption⁵

- All compromised or weak methods of communication must be disabled. Only cryptographic methods that have no known compromises may be used.
 - The following cipher suite modes must be disabled: RSA, AES-CBC, SHA, MD5, EDH, DHE, null, DES, 3DES, RC4, EXPORT-Strength Ciphers.
 - Only supported TLS protocols may be used: TLS 1.2 or TLS 1.3 with non-compromised ciphers/authentication only.
- Encryption devices must be operated in FIPS mode. This removes support for most weak or compromised protocols.
- Encryption keys, such as pre-shared keys in a site-to-site VPN, must be changed at least annually.
- Digital certificates, whether device- or user-based, must expire and be reissued at least once every two years.
- Encryption infrastructure must be on an isolated network (i.e., not part of the CJDN or an agency user network).

Faxing (Digital)

When using a digital fax machine that uses the agency network and the Internet to transmit the files, NIST-certified FIPS 140-2 compliant encryption with a 128-bit symmetric key is required.

⁴ FBI CJIS Security Policy Section 5.10.1.5 and Appendix G.3

⁵ FBI CJIS Security Policy Section 5.10.1.2.1

Firewalls⁶

- Agencies must employ firewall technology to separate their CJDN network(s) from non-CJDN network(s).
- Firewall architectures and configurations must prevent unauthorized access to the CJDN and CJI.
- Firewall equipment must be operated in FIPS mode.

Logging⁷

- All user and administrative account active logons, logoffs, and events related to access to criminal justice information must be logged and reviewed weekly for anomalies.
- All computer systems (e.g., servers, desktops, laptops, smartphones, etc.), network equipment, and cloud environments where CJI is accessed, transmitted, processed, or stored must be logged and reviewed weekly for anomalies.
- Logs must be maintained for one year.

Multifunction Devices and Printers

- Printers and multifunction devices must be configured securely, with least function and least privilege.
- Printer hard drives must be disposed of or sanitized in compliance with CJIS Security Policy requirements.
- Printing of CJI is not allowed over a wireless home network.

Radio Traffic⁸

- Radio traffic containing CJI must be encrypted using NIST-certified FIPS 140-2 compliant encryption with a 128-bit symmetric key.
- 911 and dispatch radio calls in a cloud environment or outside of a physically secure environment must be encrypted at rest using FIPS 197 AES encryption with at least a 256-bit symmetric key.

Soft Phones

- If CJI will be discussed using soft phones, all CJIS Security Policy and CJDN Security Policy requirements related to encryption in transit and at rest must be followed.
- Soft phone traffic traversing a VPN must be encrypted using a different encryption key than the VPN uses.

Virtual Private Network (VPN)

- For any user VPN connection, a network disconnect must be executed after 12 hours, regardless of whether data is being transmitted.
- VPN is required when any wireless network is used to transmit CJI.

Virtualization⁹

The following controls must be implemented in any virtual environment that contains CJI:

1. The host must be isolated from the virtual machine so that virtual machines cannot access host files, firmware, etc.
2. Audit logs must be maintained for all virtual machines and hosts for one year.
3. Audit logs must be stored outside the host's virtual environment.

⁶ FBI CJIS Security Policy Section 5.10.1.2.1

⁷ FBI CJIS Security Policy Section 4.2.5.1, 5.4.1.1, 5.4.1.1.1, 5.10.1.3, and 5.13.1.1, and Appendices D.1 and G.1

⁸ FBI CJIS Security Policy Section 5.13.1

⁹ FBI CJIS Security Policy 5.10.3.2

4. Virtual machines that are Internet-facing (e.g., web servers, portal servers, etc.) must be separate from virtual machines that process CJJ internally or be separated by a virtual firewall.
5. Drivers that serve critical functions must be stored within the specific virtual machine they services. They may not be stored within the hypervisor or host operating system for sharing.
6. Each virtual machine must be treated as an independent system, secured as independently as possible.

The following additional technical security controls must be followed where CJJ is comingled with other data:

7. Encrypt data at rest using FIPS 197 compliant AES encryption with a minimum 256-bit symmetric key.
8. Encrypt network traffic within the virtual environment using FIPS 140-2 compliant encryption with a minimum 128-bit symmetric key.
9. Implement incident detection and/or incident prevention (IDS and/or IPS) within the virtual environment.
10. Virtually or physically firewall each virtual machine within the virtual environment to ensure that only allowed protocols will transact.
11. Segregate the administrative duties for the host.

Vulnerability Remediation and System Updates

All systems, infrastructure, workstations, mobile devices, network equipment, etc. must be regularly updated to prevent or resolve system vulnerabilities, in alignment with the Common Vulnerability Scoring System (CVSS):

- **Critical – Remediate within 7 days.** These vulnerabilities pose the highest risk to applications, systems, and agency data.
- **High – Remediate within 30 days.** These vulnerabilities pose a significant risk to applications, systems, and agency data.
- **Medium– Remediate within 90 days.** These vulnerabilities pose a moderate to indirect risk to applications, systems, and agency data.
- **Low – Remediate during the next routine system maintenance.** These vulnerabilities only expose non-critical system information.

Wireless Networks

When any wireless network is used to transmit CJJ, a VPN connection is required.

Appendix A – Supporting Information for Cloud Services

If CJJ will be processed, stored, or transmitted, the cloud service must be in a government cloud. FBI CJIS Security Policy section 5.10.1.5 requires that “the storage of CJJ, regardless of encryption status, shall only be permitted in cloud environments (e.g. government or third-party/commercial data centers, etc.) which reside within the physical boundaries of APB-member country (i.e. U.S., U.S. territories, Indian Tribes, and Canada) and legal authority of APB-member (i.e. U.S. – federal/state/territory, Indian Tribe, or the Royal Canadian Mounted Police (RCMP)).”

This section also states that any metadata derived from unencrypted CJJ must be protected in the same manner and may not be used for any commercial purpose by a cloud provider or other associated entity.

A government cloud such as Microsoft Azure government Cloud or AWS Government Cloud can meet CJIS Requirements if configured correctly. It is your agency’s responsibility to ensure a compliant configuration.

Ensuring cloud vendor security and compliance with the FBI CJIS Security Policy

Agencies must review a vendor’s security practices for any services they provide, including any cloud services used in providing those services. The FBI CJIS Security Policy requires:

- vendors sign a CJIS Security Addendum as part of their contract with agencies
- any vendor employees who will have access to unencrypted CJJ must complete fingerprint-based background checks and the appropriate level of CJIS Security Awareness Training

As an optional service to agencies, the BCA maintains a vendor screening program that can complete the vendor security and compliance review. The BCA would then enter into a contract with the vendor (including the vendor’s signed CJIS Security Addendum). It would also oversee background checks and training for any vendor employees with access to unencrypted CJJ.

- More information about the BCA Vendor Screening Program can be found at <https://dps.mn.gov/divisions/bca/bca-divisions/mnjis/Pages/bca-vendor-screening-program.aspx>.
- Agencies or vendors who would like to use this program can contact the Vendor Screening Program at BCACJISSATScreening@state.mn.us.

Agency responsibility for ensuring security and compliance

Regardless of who screens the vendor, your agency is responsible for ensuring the security and FBI CJIS Security Policy compliance of any cloud services it uses. The vendor screening determines whether they are capable of meeting and agreeing to meet FBI CJIS Security Policy requirements. This does not guarantee compliance.

Each agency that uses cloud services must:

- ensure that their implementation meets FBI CJIS Security Policy requirements
- ensure controls are in place to ensure ongoing compliance
- review compliance on an ongoing basis

Microsoft cloud services

The BCA entered into a statewide five-year contract with Microsoft for its Office 365 and Azure Government Cloud services in January 2016 and is renewing its agreement through 2026. As part of the agreement, the BCA ensures that any Microsoft employees who will have access to unencrypted CJJ complete the appropriate background check and CJIS security awareness training. Individual agencies must ensure that they only use Microsoft Government Cloud services for CJJ and that their use of any Microsoft Government Cloud services meets FBI CJIS Security Policy requirements.

Amazon Web Services (AWS)

The BCA entered into a similar statewide five-year contract with Amazon in February 2016. Rather than establishing statewide agreements, AWS will work with individual agencies and vendors to ensure that their AWS Government Cloud implementations use FBI CJIS Security Policy compliant encryption and encryption key

management to protect CJI at rest and in transmission. By doing this, no AWS employees have access to unencrypted CJI, meaning that the CJIS Security Addendum and vendor employee background checks will not be required.

AWS GovCloud (U.S.) supports compliance with United States International Traffic in Arms Regulations (ITAR). As a part of managing a comprehensive ITAR compliance program, companies that are subject to ITAR export regulations must control unintended exports by restricting access to protected data to US Persons, and by restricting physical location of protected data to the US. AWS GovCloud (US) provides an environment that is physically located in the US, and access by AWS personnel is limited to US Persons, thereby allowing qualified companies to use AWS to transmit, process, and store protected articles and data subject to ITAR restrictions. The AWS GovCloud (US) environment has been audited by an independent third-party assessment organization (3PAO) to validate that proper controls are in place to support customer export compliance programs.

- AWS Compliance Program – ITAR <https://aws.amazon.com/compliance/itar/>
- AWS Compliance Program – CJIS Security Policy: <https://aws.amazon.com/compliance/programs/>

Cloud Networking – Cisco Meraki

Things to consider when implementing Meraki:

- The MX product suite is cloud-managed. Disabling Meraki personnel access to dashboards, etc., should be considered to prevent unwanted access to agency data. This is done inside of the dashboard configuration. After completion, verify that Meraki personnel do not have access to any agency data unless specifically authorized.
- Refer to the Cloud Security subsection for additional guidance related to data storage and encryption.
- Enable Syslog and NetFlow capabilities within the Meraki device. The default functionality is limited.
- Ensure there is no loss of intrusion detection/prevention capabilities when switching products. Meraki offers various tools that can perform these function. Those tools may have an additional cost.