

# **NOTICE and AGENDA for** Kalamazoo County Consolidated Dispatch Authority Technical Advisory Committee March 2, 2022

**PLEASE TAKE NOTICE** that a REGULAR Meeting of the Kalamazoo County Consolidated Dispatch Authority Technical Advisory Committee will be held on **Wednesday, March 2<sup>nd</sup>**, at 10:00 a.m. in the Chief Switalski Meeting Room at Kalamazoo County Consolidated Dispatch Authority, 7040 Stadium Drive, Kalamazoo Michigan for consideration of items, namely, on this Agenda.

## ITEM 1 – CALL TO ORDER

#### ITEM 2 – ROLL CALL

Township of Kalamazoo Police Department	Western Michigan University Public Safety
Bryan Ergang, Chairperson	Scott Merlo, Vice-Chairperson
Kalamazoo Department of Public Safety	Kalamazoo County Sheriff's Office
Michigan State Police	Portage Department of Public Safety
Kalamazoo County Medical Control Authority	Kalamazoo County Fire Chiefs Association

#### **ITEM 3 – APPROVAL OF MEETING MINUTES**

A. January 5, 2022 – Regular Meeting

#### **ITEM 4 – CITIZENS' TIME**

The Committee welcome members of the public to express their ideas or concerns about issues affecting Kalamazoo County Consolidated Dispatch Authority. Members of the public wishing to speak are requested to stand at the podium and state your full name and address for the record. Each member of the public is limited to four minutes or less.

#### **ITEM 5 – FOR CONSIDERATION**

A. Administrative Monthly Report

(Executive Director will provide a verbal update. The report will be distributed after its compiled)

- B. Old Business
  - 1. MPSCS Kalamazoo Subsystem Project Update
- C. New Business
  - 1. Emergency Management Request to patch 39COM & Countywide VHF
  - 2. Statewide Tornado Drill March 23, 2022
  - 3. MPSCS Talkgroup Optimization

#### **ITEM 6 – OTHER ITEMS**

- D. Announcements and Member Comments
- E. Next Meeting May 4<sup>th</sup>, 2022

#### **ITEM 7 – ADJOURNMENT**

Kalamazoo County Consolidated Dispatch Authority (KCCDA) meetings are open to all without regard to race, color, national origin, sex or handicap. The KCCDA will provide special aid or assistance to attend a KCCDA meeting and will provide necessary reasonable auxiliary aids and services, such as signers for the hearing impaired and audio tapes of printed materials being considered at the meeting/hearing, to individuals with disabilities, upon four (4) business days' notice to the KCCDA. Individuals with disabilities requiring auxiliary aids or services should contact the KCCDA by writing or calling: Chris McComb, KCCDA, 7040 Stadium Drive, Kalamazoo, 49009, Telephone: (269) 488-8911.



# **MEETING MINUTES for**

# Kalamazoo County Consolidated Dispatch Authority TECHNICAL ADVISORY COMMITTEE January 5, 2022 – Regular Meeting

## ITEM 1 – CALL TO ORDER

The Regular Meeting of the Technical Advisory Committee was called to order by Chief Bryan Ergang at 10:00 a.m. on Wednesday, January 5, 2022, in the Chief Switalski Meeting Room at Kalamazoo County Consolidated Dispatch Authority, 7040 Stadium Drive, Kalamazoo, Michigan.

### ITEM 2 -ROLL CALL

<u>Members Present:</u> Chris Franks (KDPS), Bryan Ergang (KTPD), Scott Ernstes (MSP), Nick Armold (PDPS), Jeff Christiansen (KCSO); Scott Merlo (WMUPD), Craig Dieringer (KCMCA), Chip Everett (KCFCA)

<u>Others Present:</u> Jim Sandlin, Jeff Troyer, Torie Rose, Jon Moored, Sarah Clark, Marie Gleesing, Marty Ftacek, Chris McComb

#### ITEM 3 - ORGANIZATIONAL ITEMS

#### A. Election of Chairperson

"Motion by Mr. Merlo, second by Mr. Armold to elect Mr. Ergang as the Chairperson of the KCCDA Technical Advisory Committee for 2022."

#### On a voice vote, MOTION CARRIED.

B. Election of Vice-Chairperson

"Motion by Mr. Ergang, second by Mr. Armold to elect Mr. Merlo as the Vice-Chairperson of the KCCDA Technical Advisory Committee for 2022."

#### On a voice vote, MOTION CARRIED.

#### ITEM 4 - APPROVAL OF MEETING MINUTES

A. November 3 – Regular Meeting

"Motion by Mr. Merlo, second by Mr. Christensen to approve the November 3, 2022, Regular Meeting Minutes as presented."

#### On a voice vote, MOTION CARRIED.

#### ITEM 5 – CITIZEN'S TIME

There were no citizen comments.

#### ITEM 6 - FOR CONSIDERATION

### A. Administrative Monthly Report

Mr. Troyer stated that because it is so early in the month, the Administrative Reports are not completed yet and would be sent as soon as possible. He stated that the Board is revising the bylaws. He stated that participation has been allowed via conference call, but that will not be allowed in the future. All meetings will be in-person. In staffing, we lost and gained a full-time employee. We have under 100 employees, so we are not subject to the OSHA temporary standards of mandatory vaccinations. This might help us with recruiting because other centers are requiring mandatory vaccinations. We have a couple of COVID positive cases and one pending, but we are still able to manage keeping distance in the center. We have had no transmissions traced back to the workplace.

B. Old Business

There was none.

- C. New Business
  - 1. 2021 LEIN Audit

Ms. Rose stated we did not have any problems with the LEIN audit. The auditor asked for a network diagram to be updated, it was done so we had zero dings.

2. MPSCS Kalamazoo Subsystem Project Update

Mr. Troyer stated we are about a month behind on the WMU BTR2 site. The Oshtemo, Portage and Augusta sites are on track. Foundations are poured, towers are on order, shelters are ready to be delivered but we are waiting on WMU to be ready. Waiting on WMU authorization from the Economic Development Administration prior to closing on property. Fiber has to be ordered from PFN also. We are not expecting to miss the deadline at this point. We are waiting for the utility easement agreement to be executed by the City of Kalamazoo so electrical service can be run to the Oshtemo Tower. We also have submitted a request to Consumers for the WMU property as we want to use their access drive off of Parkview and we will need to plant bushes/trees in Consumers' easement area in order to create the requested landscape buffer from the tower compound.

3. CAD and Mobile System(s) – Exploring Opportunities

Mr. Troyer stated that some agencies are looking at other RMS systems and we have been asked to look at other CAD systems. He stated the Authority is open to other opportunities and we may work with an agency to evaluate a system, but it doesn't mean we will switch. We will have the capability to export data to whatever RMS system agencies use.

- C. Other Items
  - 1. Agency Round Table

Mr. Troyer stated we received a request from the fire agencies to have a ten-minute timer for highway incidents. We have fire ground timers to trigger the dispatcher to check-in with command during fires.

Mr. Troyer stated that Emergency Management updated the repeater that was at Borgess and want a permanent patch to 39 Comm. He needs to do more research and will bring it back to the Committee in March

## 2. Next Meeting

The next Technical Advisory Board meeting will be Wednesday, March 2, 2022, and will be held in the Chief Switalski Meeting Room at KCCDA, 7040 Stadium Drive, Kalamazoo, MI 49009.

3. Adjournment

The meeting was adjourned at 10:24 a.m.

From:	Victoria Rose	
То:	Jeff Troyer	
Subject:	FW: "Countywide" VHF repeater	
Date:	Monday, February 28, 2022 1:51:49 PM	
Attachments:	JPS DataSheet RSP-Z2 3 22 17.pdf	

From: Mike A. Corfman <macorf@kalcounty.com>
Sent: Wednesday, January 5, 2022 9:38 AM
To: Victoria Rose <VRose@kccda911.org>
Cc: Martin Ftacek <MFtacek@kccda911.org>
Subject: RE: "Countywide" VHF repeater

Thanks. This would be a JSP RSP-Z2 single unit hardware patch we would provide and set up here with 2 of our dedicated radios. The unit can be remote controlled so you guys could activate/deactivate it from there as well. MC

From: Victoria Rose <<u>VRose@kccda911.org</u>>
Sent: Wednesday, January 5, 2022 09:29
To: Mike A. Corfman <<u>macorf@kalcounty.com</u>>
Cc: Martin Ftacek <<u>MFtacek@kccda911.org</u>>
Subject: RE: "Countywide" VHF repeater

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

I will talk to Jeff about it.

From: Mike A. Corfman <<u>macorf@kalcounty.com</u>>
Sent: Wednesday, January 5, 2022 8:51 AM
To: Victoria Rose <<u>VRose@kccda911.org</u>>
Cc: Martin Ftacek <<u>MFtacek@kccda911.org</u>>
Subject: "Countywide" VHF repeater

Good morning Torie,

Hope you had a great holiday!

I think you are having a fire TAC meeting today so I thought I would pass this along if you had not seen it on TexCom – The VHF "Countywide" channel repeater at Borgess Hospital was replaced the week before Christmas.

We installed a repurposed MSR-2000 repeater and it is working tremendously better. We are going to do some antenna work when the weather gets better but just this update increased the range for

mobiles countywide and portable range through most of the metro area. NW and SW areas of the county are the blank spots for portables but generally it is a big improvement.

This channel can be used any time by anyone in the county for interoperability. We don't have any restrictions other than during times we have the EOC activated or some other muliti-jurisdictional event such as a weather emergency, OEM has first dibs on it for coordination of resources.

I would like to install an ACU patch at some point from Countywide to 39COM so we have cross band operability for everyone. I think all fire radios have Countywide, and all MPSCS radios in Kalamazoo County have 39COM so we could have that patched at all times if that seems reasonable.

Maybe discuss at todays meeting?

Thanks,

MC

## Mike Corfman

**Director** Kalamazoo County Office of Emergency Management

Kalamazoo County Sheriff's Office 1500 Lamont Avenue, Kalamazoo, MI 49048 *Phone: 269-383-8743 Fax: 269-383-8791 Desk: 269-385-6137 Cell: 269-250-0808* <u>macorf@kalcounty.com</u>

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Jeff,

The attached spreadsheet has the 499, WMU and Metro talkgroups. Also, I made some changes to the original spreadsheet to make it easier to document.

The following columns will need to be completed:

The "County Site Access Required" column in the Statewide Talkgroups worksheet must be filled out. The "Justification" column only needs to be completed if the required talkgroup site access extend beyond Kalamazoo and surrounding counties. There is also a "Common Scenario" worksheet within the spreadsheet.

The "Common Scenario" worksheet has some common circumstances that require communications beyond the adjacent counties. This worksheet should be used to identify the recommended talkgroup(s) designated in the communication plan for each of the common scenarios listed. The solution for many of these situations is to use the existing STAWx talkgroups. These interop talkgroups are programmed in all radios and can be found in Zone E. The "Talkgroup Recommend" column of the "Common Scenario" worksheet will need to be updated with the talkgroup that will be used to meet extended coverage requirements for each scenario.

Let me know if you have any questions.

Thanks,

Rich Melbow Southwest Region Supervisor State of Michigan – DTMB – Center for Shared Solutions – Michigan's Public Safety Communications System (MPSCS) Department of Technology, Management & Budget (DTMB) Mobile: (269) 207-8009 Office: (269) 731-2979 Fax: (269) 731-2979 melbowr@michigan.gov



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message.



# **History**

Michigan Since the initial build of the system, it has been MPSCS policy that local agency talkgroups be enabled on the sites that provide coverage within their county and an additional "ring" of sites that provide coverage surrounding that county. It has also been MPSCS policy that when there is an operational need for larger coverage areas, specific agency talkgroups can be enabled for a larger area of operation. An example of this would be a "Travel" talkgroup that is enabled throughout a larger area so that public safety personnel doing prisoner transports can report back to their home dispatch. The benefits of a shared statewide public safety radio system are numerous and intuitively obvious, although the need for these policies can be less obvious. Nevertheless, they are necessary standards put into place at the birth of the system to protect public safety communications across the statewide system.

MPSCS capacity is carefully designed based on peaks of traffic for each site/area. A site in a low population area does not receive the same amount of usage as a site in a high population area and therefore does not have as many available resources. This is an industry standard design requirement driven by the costs of system implementation and maintenance, FCC rules and regulations, and limitation of available spectrum (frequencies). These best practices for system design will accommodate communications for the vast majority of public safety events. Rarely, there will be an abnormal event that results in extreme amounts of public safety communications causing "busies" (users are placed in a queue until a resource is available). The keys to maintaining reliable communications in these extreme events are good communication plans and system configurations.

One of the features that is available to MPSCS users is the Emergency Alert. This allows a user to push the "emergency button" on their radio causing an emergency status to go out over their currently select talkgroup and a computer client at their dispatch location. An Emergency Alert also dedicates a resource at any site that the selected talkgroup is currently using until the user manually deactivates the Emergency Alert on the radio or a no activity timeout timer is exhausted. In earlier system revisions of the MPSCS, an Emergency Alert would only work if the user's selected talkgroup was allowed on the MPSCS site they were trying to use. In other words, if the talkgroup was not valid at the site, the Emergency Alert would not work.

Due to this limitation, many of the talkgroups created during early years of the MPSCS were enabled statewide. This ensured that if a public safety user were in danger and activated an Emergency Alert, it would be received on the system, regardless of the talkgroup. Unfortunately, this also allows users to travel throughout the state and unnecessarily listen to talkgroups from their home area. When this happens, the entirety of that user's talkgroup traffic will utilize whatever site the user happens to be affiliated to as they travel.

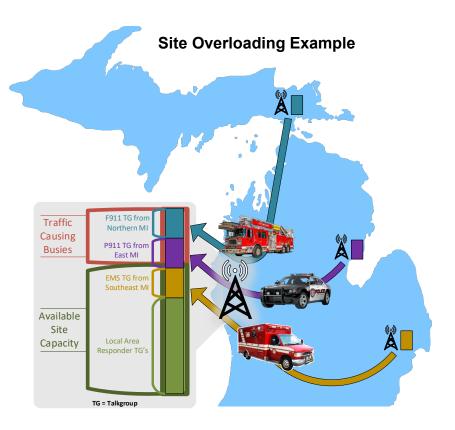
The issue arises when this unneeded talkgroup traffic is dragged to sites that were not designed with enough resources to accommodate that talkgroup's additional loading. This issue is compounded when multiple agencies converge from throughout the state and each of them



Michigan's Public Safety Communications System
Talkgroup Optimization

drags their home talkgroup traffic to the same site. Figure 1 provides an illustration of this scenario.

This scenario encountered is numerous times each year. One frequent example has been large public safety conferences where many representatives from many attending. agencies are Other frequent examples are high visibility public safety emergencies such as wildfires. In both cases, a user who is not involved in the response is listening in, creating a condition for unnecessary loading, and therefore, unintentionally creating system busy conditions.



# Why Optimize Now?

In 2010, the MPSCS was upgraded to a system revision that provided a new P25 Standard which allowed Emergency Alerts to function regardless of whether the talkgroup was valid on a site or not. In other words, no matter what talkgroup a user is on, an Emergency Alert will function as normal, and a resource will be dedicated at the user's site for that emergency. Once the new P25 Standard was in place on the system, MPSCS shifted back to building new talkgroups in line with policy, enabling them according to their needed area of operation.

As a result, of the 340 "911" talkgroups (P911, F911, E911, and FE911) on the system, 179 are set to their respective regional sites. This equates to approximately 53% of 911 talkgroups. The MPSCS now has over 2000 agencies utilizing the system allowing for interoperable communications as never before. This unprecedented spike in system growth over recent years is largely due to local agency radio systems reaching end of life and agencies electing to migrate to the MPSCS as opposed to replacing a standalone system. Therefore, the previously described scenario is becoming more and more common and has driven the need to take action and reduce this increasing risk to our first responders. To reduce this risk, talkgroups that did not comply with policy when implemented, need to be optimized to appropriate areas of operation. This will greatly reduce the occurrences of overloading like the example previously described, without hindering the Emergency Alert capability.



# **Plan of Action**

Agencies whose talkgroups are optimized to operate within their region have used good communication planning to account for times when communications are necessary out of their normal footprint. This includes solutions such as setting up statewide travel talkgroups or temporarily patching talkgroups when needed. Below are some specific solutions:

- **i Prisoner Transport:** Agencies use talkgroups specific for statewide travel. This allows for communications back to dispatch but eliminates the risk of overloading talkgroups that are needed to respond to local day to day activities.
- i Hospital/Patient Transport: There are a variety of regional health talkgroups (Ex: CHREGx) that are now standard in all MPSCS EMS radio templates. These allow for communications to continue throughout the state while medical units are transporting patients and traveling long distances.
- **i Chases that Extend Outside of Area:** Many agencies have created xxCHASE (xx = county number) talkgroups that have a much broader access profile. As part of their communication plans, all agencies when migrating onto MPSCS or re-templating, should include talkgroups of their neighboring jurisdictions to allow movement to those neighboring xxP911 talkgroups during these scenarios. Another utilized solution is the area's Statewide talkgroup (STATWx) that is on every PSAP's resource list. One frequent concern with this type of operation is that an officer should never be changing talkgroups during a chase. Most agencies address this concern by having a secondary unit (or any non-primary chase unit) be responsible for communications and designating that communication path. During solo unit chase scenarios, the dispatch center patches together talkgroups to ensure interoperability.
- **i Mutual Aid with Other Agencies:** Good pre-planning for any agency when on boarding or re-templating is critical. Planning should include Regional Ops talkgroups (R1, R5, R6, R7 all have a Regional Ops zone that are now included in all standard templates), neighboring jurisdictions, and MABAS (fire only) talkgroups. User knowledge, familiarity, training, and awareness of what talkgroups are located where, can solve many of these communication roadblocks. If a common path cannot be determined, an urgent request for event talkgroups can be enabled and designated by the MPSCS Network Communications Center (NCC).
- **i Detectives/Surveillance Covering Wide Areas:** There are a variety of regional interoperability talkgroups that are now standard in all MPSCS radio templates. Agencies also create their own proprietary talkgroups that are enabled over a wider area for specific activities such as these.



It is the intention of the MPSCS to address the legacy "911" talkgroup areas of operation and optimize them to work within the agencies' respective regions.

Doing this will increase the reliability of those 911 talkgroups and other communications across the system, especially in large events when public safety needs to communicate the most. It will also eliminate significant risks induced by adjusting talkgroup areas of operation on the fly. Adjustments will always be made when conditions warrant changes but with the current system layout, on the fly changes have become necessary too often due to the previously described overloading scenarios.

As MPSCS works with agencies to make these changes in the near future, the following process will be used:

- 1. MPSCS identifies an agency's talkgroups that require adjustments.
- 2. An MPSCS representative contacts the agency's point of contact to explain the proposed changes and reason for the changes.
- 3. MPSCS and agency representatives collaborate on talkgroup optimization changes and discuss if the agency needs to make communication planning updates.
- 4. MPSCS and agency will finalize talkgroup configurations and set a date for implementation of the changes.
- 5. MPSCS makes changes on agreed upon date.
- 6. MPSCS and agency work together to make any refinements if necessary.

## Conclusion

Public safety throughout Michigan has had overwhelming success in partnering to create one of the most reliable and interoperable environments for public safety communications, in the nation. This effort did not happen overnight, and as the system grows, as more agencies partner together, and as technology changes over time, constant attention and care is required to optimize such a dynamic environment. Adjusting talkgroup areas of operation is one of those needed optimizations. Doing so eliminates unnecessary loading on the system, minimizes unnecessary risks during public safety events, ensures efficient use of public safety spectrum as a limited resource, and promotes responsible use of Michigan's taxpayers' money. Through collaboration between MPSCS and those affected agencies, we can usher the public safety community through this change, while continuing to improve the reliability of the services we provide.

Talkgroup ID	Talkgroup Alias	County Site Access Required
		Kalamazoo and surrounding county
Example1	39Example1	sites
		Kalamazoo, Calhoun, Van Buren and
Example2	39Example2	surrounding county sites
80003469	395CIU	i
80003470	395CMD	
80003517	395CPO	
80003466	395P3	
80003467	395P911	
80003465	395PVT	
80003468	395TAC1	
80003820	395TNG	
80003425	39AD1	
80003426	39AD2	
80003427	39ADM	
80003428	39ANM	
80003429	39ANM2	
80003430	39ANM3	
80003431	39APD	
80013044	39ARC	
80003432	39BORG	
80003433	39BRON	
80003617	39BVH	
80003434	39CMCO	
80003384	39COM	
80003714	39COM1	
80003715	39COM2	
80003716	39COM3	
80003717	39COM4	
80003718	39COM5	
80003435	39DET	
80003082	39DRUG	
80003644	39E911	
80003816	39EDU	
80003497	39EM1	
80003499	39EM2	
80003436	39EM3	
80003382	39EMS1	
80003383	39EMS2	
80003740	39FGRD1	
80003694	39FGRD2	
80003695	39FGRD3	
80003696	39FGRD4	
80003711	39FGRD5	
80003712	39FGRD6	
80003713	39FGRD7	
50003715		

80003437	39FIRE
80003438	39GPD
80003439	39HAZ
80003640	39HD
80003626	39KCMS
80003818	39KCSRD
80003952	39KPS01
80013103	39KVCC1
80013104	39KVCC2
80013134	39LCARE
80003440	39LEIN
80003623	39LIFE
80003819	39MEDCO
80003726	39METEM
80003817	39MOUNT
80003424	39NARC
80003236	39P911
80003442	39PARK
80003443	39PARK1
80003444	39PARK2
80003823	39PFD1
80003824	39PFD2
80003825	39PORT3
80003826	39PORT4
80003624	39PRIDE
80003445	39RECV
80003822	39RP678
80003446	39RPD
80003625	39SCEMS
80003447	39SPD
80003448	39SPEV1
80003449	39SPEV2
80003450	39SPEV3
80003451	39SPEV4
80003452	39TAC1
80003782	39TAC10
80003783	39TAC11
80003784	39TAC12
80003785	39TAC13
80003786	39TAC14
80003787	39TAC15
80003453	39TAC2
80003454	39TAC3
80003455	39TAC4
80003777	39TAC5
80003778	39TAC6
80003779	39TAC7

80003780	39TAC8
80003781	39TAC9
80003456	39VPD
80003608	39WMAC
80003498	39WMU
80013102	39WOLV1
80003471	499AD1
80003472	499AD2
80003473	499BMB1
80003474	499BMB2
80003475	499BMB3
80003476	499CID1
80003477	499CID2
80003478	499CID3
80003479	499CMD
80003788	499CP01
80003789	499CP02
80003480	499DISP
80003482	499FIR2
80003481	499FIRE
80003483	499KV1
80003484	499KV2
80003790	499KV3
80003791	499KV4
80003485	499LEIN
80003486	499SW1
80003487	499SW2
80003488	499SW3
80003489	499TAC1
80003490	499TAC2
80003493	499TAC5
80003494	499TAC6
80003495	499TRU1
80003496	499TRU2
80003727	METBUS
80003728	METCVAN
80003730	METEVT1
80003731	METEVT2
80003732	METPRVT
80003729	METVAN
80013197	WMUDPS
80013198	WMUEVNT
80013199	WMULEIN
80013200	WMUPRIM

Justification	TG/MG Site Access Profile	Security Group	Talkgroup Regroupable
No justification required	ALLSITES	SYSTEM	Yes
Mutual aid agreements with these			
counties		SYSTEM	Yes
counties	ALLSITES		
	ALLSITES	SYSTEM	Yes
	=	5. <b>5</b> . <b>2</b>	

ALLSITES	SYSTEM	Yes
ALLSITES	SYSTEM	Yes
ALLSITES	SYSTEM	Yes

ALLSITES	SYSTEM	Yes
ALLSITES	SYSTEM	Yes

Talkgroup Enabled	Service Mode	Access Type	SBR Channel Selection	Group Text Capable
Yes	No	FDMA-only	Dynamic	Disable
Yes	No	FDMA-only	Dynamic	Disable
Yes	No	FDMA-only	Dynamic	Disable
Yes	No	FDMA-only	Dynamic	Disable
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TG/MG Capabilities Profile

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Date Modified

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