

Central Minnesota  
Regional Logger Committee Meeting  
Microsoft Teams Meeting  
January 14, 2022 – 11:10 a.m. (After RAC)

**Members/Alternates Present:**

1. Micah Myers & Brandon Larson, Chair – City of St. Cloud
2. Tom Egan & Kevin Smith – Douglas County
3. Jon Combs – Grant County
4. Jody Norstegard – Kandiyohi County
5. Sheriff Brian Cruze – Meeker County
6. Andy Beckstrom, Vice Chair – Mille Lacs County
7. Jason Karlgaard & Greg Seim – Otter Tail County
8. Sheriff Tim Riley – Pope County
9. Kristen Lahr – Stearns County
10. Dona Greiner – Stevens County
11. Haley Dubois – Wright County

**Members/Alternates Absent:**

12. Big Stone County
13. Sherburne County
14. Wilkin County

**Guests Present:**

Laura Anderson – Sherburne County  
Dar Pankonie – Washington County  
Dereck Leyde – Northland Business Systems  
Heidi Schultz – Northland Business Systems  
Scott Bauer – Northland Business Systems  
Scott Wosje – Northland Business Systems  
Steve Tait – ECN RIC

**Approval of the Agenda**

*Meeker County made a motion to approve the agenda. Stearns County seconded, motion carried.*  
Roll Call Vote: City of St. Cloud – Aye; Douglas – Aye; Grant – Aye; Kandiyohi – Aye; Meeker – Aye;  
Mille Lacs – Aye; Otter Tail – Aye; Pope – Aye; Stearns – Aye; Stevens – Aye; Wright – Aye.

**Approval of Minutes**

*Stearns County motioned to approve the minutes from December 10, 2021. Douglas County seconded, motion carried.* Roll Call Vote: City of St. Cloud – Aye; Douglas – Aye; Grant – Aye; Kandiyohi – Aye; Meeker – Aye; Mille Lacs – Aye; Otter Tail – Aye; Pope – Aye; Stearns – Aye; Stevens – Aye; Wright – Aye.

**Communications**

None.

## **NEW BUSINESS**

### Chairperson Nominations & Election

Larson stated per our Bylaws we need to conduct nominations and elections for officers. Larson opened the nominations for Chairperson for 2022. *Stearns County nominated Brandon Larson, City of St. Cloud. Grant County seconded.* Larson asked do we have any other nominations. Hearing no other nominations, Larson closed the nominations for Chair. Roll Call Vote: City of St. Cloud – Abstain; Douglas – Aye; Grant – Aye; Kandiyohi – Aye; Meeker – Aye; Mille Lacs – Aye; Otter Tail – Aye; Pope – Aye; Stearns – Aye; Stevens – Aye; Wright – Aye.

*Larson opened nominations for Vice Chair. Stearns County nominated Andy Beckstrom, Mille Lacs County. Pope County seconded.* Larson asked do we have any other nominations? Larson closed nominations for Vice Chair. Roll Call Vote: City of St. Cloud – Aye; Douglas – Aye; Grant – Aye; Kandiyohi – Aye; Meeker – Aye; Mille Lacs – Abstain; Otter Tail – Aye; Pope – Aye; Stearns – Aye; Stevens – Aye; Wright – Aye.

### BCA Requirements – Encryption – Discussion

Larson reported at our last meeting, we had a discussion last month regarding the BCA requirements. Handed down from the FBI and through the BCA to all of us it has been identified any radio communication that includes criminal justice information, which can be a significant part of law enforcement communications on ARMER, requires encryption of a certain level that is standard nationwide of encryption. That encryption is not only on the ARMER subscriber radios and the talkgroups, but that encryption also is on the data side for our loggers which impacts us and our committee. In your meeting packet, we have a document from Northland Business that was originally authored by CISA which is the federal agency for cybersecurity infrastructure security. It discusses encryption and security with encryption. A little bit later Larson will talk about a presentation that Northland Business has put into our meeting packet as well. Last meeting, we requested Northland provide us some high-level information and high-level pricing regarding what it would take for encryption for the logger.

Schultz explained Northland wanted to discuss the new encryption mandate with the region. With the new encryption mandate from the BCA any 9-1-1 agency with a call logger will need to add encryption to their system. The BCA has mandated the talkgroup traffic to be CJJ data as of January 1<sup>st</sup>, 2022. This means the 256-bit encryption needs to be added to talkgroups to be secured. The BCA has mandated radio traffic to be CJJ data with the recommendation to encrypt both the talkgroups and 9-1-1 phone calls as we know there is CJJ data on the calls as well.

Bauer explained what we would be wanting to do is add two more servers per data center, and they will be the key management server (KMS). The yellow arrows are for the API communication for encryption. The reason why we have two servers or two KMS per data center is for high availability that way if one of the servers that manages the encryption and decryption were to go down, or have network connection issues, the other one will just automatically take over as a failover. Then it will push the encryption to the loggers and it will encrypt whatever talkgroups that we designate; and agent names, employee profiles, for the 9-1-1 based phone calls as well that we deem. It can be set-up that way to push out to the agency's premise recorders as well for encryption.

## **NEW BUSINESS (Continued)**

### BCA Requirements – Encryption – Discussion (Continued)

Larson asked can you explain what is the impact operationally if we only had one KMS server per data center and it lost connectivity to the data center? Bauer explained it would not be able to encrypt the new recordings as to the termination of communication. And all the recordings that are encrypted would not be able to be played back. Larson stated so, if we lost connectivity with one of those servers for whatever reason, and we had chosen not to go with this redundant server, then we would not be able to either ingest the talkgroup information, so our recording would stop, and we would not be able to pull back and play back any recordings, is that correct? Bauer replied as for the recording stopping, Bauer does not believe that would be the case, but the new talkgroups being recorded after the disconnection of the communication, Bauer believes those would then be a plain audio file rather than being encrypted with a 256-bit encryption. Bauer believes you would still actually be getting recordings, they just would not be encrypted, but then every audio file that has been encrypted would no longer be available for playback. Larson stated if we lose the connection to the key management server we lose the keys to unlock the encryption for playback purposes and basically makes all that data inaccessible at that time, right? Bauer replied yes.

Leyde explained we did talk this through with Verint. We just felt given the redundancy you guys have for resiliency to be up 100% of the time we felt it was in your best interest to have the two. We see there could be some potential risk only having one KMS per structure there. Just like you see there, there are two per data center and we thought that was the best way to propose this to you guys. Larson asked and then implementing this strategy that you have in front of us, does that encrypt all of the talkgroups on the logger? Leyde replied, yes, we are proposing we would encrypt all. It is licensed-based, so you could technically pick and choose which talkgroups, which channels are encrypted and which ones are not. On the next slide we will give you a high-level overview of the pricing, but you can actually cherry pick. It is licensed by channel. For local premise servers and for these talkgroups as well.

Wosje added, so Stearns County could choose not to encrypt their channels, but those state/regional channels the Logger Committee has to decide as a group do we want encryption yes/no and then at the core you would have to look at the cost of encrypting your state and regional channels. You would choose as a group to encrypt those shared channels, but then each agency could decide whether to pay for encryption for their specific channels. Stearns could choose not to pay, and another county could choose to pay and have that done. You are able to break that up a bit, but as Leyde said, the encryption is a double-edge. To have it encrypted is secure, but Wosje lost a key this week for 2FA and you suddenly cannot get to your data, so that is the double-edge of encryption. It is secure, but if you lose your key to what Leyde said, you are in a world of hurt.

Karlgaard asked has there been any clarification as to what the definition of criminal justice information is, and what exactly is required to be encrypted? Are we talking every single ARMER talkgroup, or just law enforcement, etc.? Do we know what we are talking about first?

Myers replied to that, the BCA is dancing around this. And this is one of the topics of discussion at the upcoming regional quarterly as to further explaining what information is deemed CJ data. That is what has to be encrypted, not every talkgroup has to be, it is what they have identified.

## **NEW BUSINESS (Continued)**

### BCA Requirements – Encryption – Discussion (Continued)

The challenges Myers can see is there is stuff that could be inadvertently. This is the question Myers would ask at this meeting that is coming up. We have got our talkgroups we have identified what are going to be law enforcement transmission, but someone inadvertently patches a channel to it. Does that other talkgroup need to be encrypted now? Myers would say yes, but then in that case are you trying to encrypt everything? No, there is a cost that is going to be associated to this and we will have to get that defined. We still do not know, but we do know whatever is deemed CJI is going to have to be encrypted in transport and at rest. So, we will have to do this. It is how broad of a brush are we going to take on this once we know that. The cost is going to drive that. We are not encrypting, because we want to encrypt it. We are encrypting, because we are told we have to.

Tait stated this is the question that is being asked across the state. What is CJI? Some examples Tait has been provided by sheriffs, a predatory offender that is CJI, but Tait can also go to the public BCA website, put in the zip code and Tait gets a list of every sex offender in my community. So, if Tait can look at it from the library and get CJI as a member of the public, but Tait cannot tell the deputy on the side of the road via ARMER, that does not make sense. Tait explained Crow Wing County posts all of their county warrants on a public website, so you can look up and see if someone has a Crow Wing County warrant. Felony warrants are also NCIC and considered CJI, so again Tait has public access to criminal justice information through a public website, but Tait cannot let anybody know on ARMER without encrypting that. So, there is a lot that the BCA needs to answer for, because operationally, this is not going to work. So, before the region commits to anything we really need to think that through and get that clear definition of what Myers said, what do we have to encrypt, that is going to be the key discussion and hopefully we will hear that from the BCA on the 24<sup>th</sup> and at the PSAP conference in March and at our conference in April, because there are 49 other states and 6 territories that are supposed to be doing the same thing and Tait does not see any of them that have statewide encryption to the level that the BCA is telling us to do. There is something being lost here, that to Tait this is a little of an unrealistic mandate, and we really need to think through how we are doing it before we throw a lot of dollars at it.

Myers stated we need to know what that number is going to be whether, or not, we do it, so when we are making our argument back to the BCA saying look this is what it is going to cost us. What we are looking at here today was let's define this. Figure out what level of encryption if we have to go there we are going to do, so then we can go back and say by the way BCA, you mandated this, how about you loosen up the purse strings and give us something to offset our costs. Otherwise, stand down from your recommendation. This is an exercise we are going to have to do to make our argument.

The way Karlgaard was looking at it is this all came initially from the FBI, right? The BCA is just passing it through is the way Karlgaard understands it, so what is CJI that the FBI is in charge of? That would be NCIC, so is it only NCIC information they are considering criminal justice information, because the rest of it, Karlgaard does not think would be FBI information.

Myers stated to that point somewhere in this discussion Myers heard the actual phone call coming in, so that is being recorded on a premise logger, then that is dumped to the regional logger, then when you do the replay when you are building all this stuff together.

## **NEW BUSINESS (Continued)**

### BCA Requirements – Encryption – Discussion (Continued)

Myers had some concerns with that key, because now Myers cannot get information that Myers is required to get back because of key failure. There has got to be some way that we are not painting ourselves in a box on that as well, but everything we are discussing here today is the information that needs to be presented back to the BCA and to the FBI. Myers has seen in the past where there have been FBI rulings that BCA takes ahold of and then the FBI gets challenged and backs off, but then the BCA says we can be more stringent than the FBI and they do not back off. Myers gave an example if you are familiar with 2FA. When that came out, they were requiring that and it was a New York agency that challenged the FBI and they won in court. But then the BCA, because too many people had already started making provisions on their networks to be in compliance they did not back off on it. Now it is a moot point, they do not do it anymore. This is one of those ones that we need to know what it is going to cost, we need to make our case saying do we really need to do this. On the chance they say yes you do, we need to know what it is, so we can start planning, we can look at opportunities to try and acquire funding for it. We have to take the worst-case scenario and work our way back from there, and it will probably come somewhere in-between.

Larson stated it was a clarification to Northland. What you are presenting here today is just to bring us up to compliance for the core. What the Central Logger Committee oversees which is the core equipment in St. Cloud. On top of it, Larson thinks each agency would have to have equipment, is that correct? Leyde replied that is correct. Our goal here with presenting is more or less for educating everybody what we are hearing from the BCA and making sure everybody is aware we are not expecting any decisions today, because there is a lot of unknowns Leyde still feels as well that we need to iron out. We just wanted everybody to be aware and to have a high-level summary of the pricing just so there is no sticker shock down the road, and you did not have adequate enough time to prepare for budgeting for encryption. Wosje qualified that they do not need extra equipment at each location, they would need the licensing, but the equipment (encryption servers) sits at the core. Leyde replied, correct, but City of St. Cloud likely would need to supply us with virtual machines. Wosje replied that is still part of the core. Each site would not have to have hardware. Wosje explained there is no additional hardware required at each site, only at the core.

Myers stated speaking of licensing so that is for the encryption. What Myers is getting from his premise, it is not being encrypted at the premise logger and sent over encrypted. It is being sent clear mode to us and if you think about that, that not in transport. So, should it not be encrypted in transport? Wosje replied it actually is. Bauer responded the recordings will get encrypted first on the recorder and then it will upload into the data center and into the NAS or the archive locations. Before it goes into transit it will get encrypted. Wosje replied there is no hardware needed, but it is encrypted in transit. Myers question then their premise loggers need to have something running on them to encrypt it, because if the information when the call comes in it is encrypted they have to identify what they are encrypting, and then that gets transmitted to the core. So, you would have to have something. Is it software only? Wosje replied, yes, it is software. Myers asked so that is on the premise logger, so if Myers license on the backend that takes care of my premise logger so that anything Myers is recording locally and then sending to the regional logger that is going to be part of a whole call? Wosje replied correct.

## **NEW BUSINESS (Continued)**

### BCA Requirements – Encryption – Discussion (Continued)

Leyde explained we are just expanding upon what we have already done with the Motorola consolidation where you have everything at your core verses having the stand-alone agencies, so we are just taking that to the next level with the encryption-side of it as well. Leyde added think of it from that side of it as well with what we have done with the Motorola AIS's. We bring it all together. We are doing that here with the encryption.

Wosje just wanted to make it clear too that we are not coming to you saying you have to do this. We are being asked. The reality is you are coming to us asking for this pricing. How much does encryption cost. Wosje explained Karlgaard's point is valid in figure out what you have to do first before you have to spend the money. Like Tait said, who knows exactly what we have to record, why is the State of MN so far ahead of the rest of the Union? Wosje stated just know we are not coming to you saying you have to do this. We are coming to you saying here is the numbers; if you have to start talking about encryption, this is what you have to consider.

Leyde explained the implementation, the \$22,000 is at the core; your primary and secondary the installation. We are looking at 6-8 days, it is very intense with the amount of services that goes into this, so that is the price tag there. We would need the City of St. Cloud, the Central Region, to supply the virtual machines for this infrastructure and then those would just reside in your data center. Then as far as the channel count there, the \$96,000 that is your primary and secondary servers. We can license by channel, by talkgroup, but in this scenario we just went worst case how much it would cost to do everything meaning all your talkgroups. This does not include the premise sites, however, the premise sites could be added, but we would treat that similar to the logger for each site just like we did in the past. And then you have the installation and configuration below. Total of \$151,000. This is worst case scenario for everything.

Myers asked what is the recurring costs? Leyde replied the recurring costs is a percentage of the license. So, it will be a percentage of that \$96,000. We do not have that ready today, but we can get that to you. Myers asked if I divide that 340 into the \$96,000 Myers can come up with a per license per talkgroup then? Leyde replied correct.

Wosje wanted to clarify this so we are making sure to give them accurate numbers. Larson's point said our job as the Logger Committee is to maintain the core. This actually covers all the talkgroups, so it might be that Wilkin says I do not want to pay for encryption on my talkgroups. This actually does include the cost to encrypt all the talkgroups, correct, regional/state/local? Leyde replied correct, just specific to talkgroups though, not premise 9-1-1 calls.

Myers stated so we are only getting part of the picture. Myers wants to know what it is going to cost them from the premise side, regardless of if I do '340' or if '1.' Do '1' your implementation and installation numbers do not change. Is that a safe statement? Leyde replied that is a pretty safe assumption, because you still have your core you have to build. Whether it is one talkgroup or a thousand, or a thousand channels. You still have that time that goes into building that core. Wosje added that is a good point, because Blue Earth County came to us and said what would it cost for me to encrypt, and Northland was like just about the same as if your whole region decides to encrypt. There are significant infrastructure costs in setting this up.

## **NEW BUSINESS (Continued)**

### BCA Requirements – Encryption – Discussion (Continued)

Leyde added when you are doing that calculation, take the 340 times that by 2, because you have your primary and your secondary. And then you can divide that by that \$96,000 and you will see the cost per channel. Greiner just has a question for the software and the cost for each county we will need to have that clear too.

Larson stated after seeing your presentation and learning more about this, Larson thinks we are going to have to have a complete picture including what the cost would be for those premise loggers as well, since that is going to be a central core piece. Like everyone said, there is no decisions that are going to be made soon. This is all just information gathering at this point.

Myers said this would be to the folks from Northland. We do not have the premise, but Myers would think you would have to know that number. How quickly can you get a total package that shows we are encrypting all this, you know the configurations. Because each premise logger is a little different, how many channels are available on that premise logger. Knowing what we have in the region, or per channel, so we can set budgets for the folks. So, to encrypt your premise logger that deals with your phone and your other non-ARMER resources that you are logging, that you are putting together as part of the whole call package, what is their cost going to be? It would be nice to have all this, because we are going to have continued discussions on this. We want to know the worst case scenario from end to end. What is it going to cost the membership?

Leyde replied we can work on that for you guys. One thing to just be thinking about for each premise site, \$150 per channel, times that by the number of channels you have at your premise site, that is what each site would be responsible for any local channels you wish to encrypt. 9-1-1, if you wanted to do any additional radios you could, it is totally up to you guys, but we can also break that out as well with some pricing. At least you guys will have a little more meat to take away and you could run some scenarios. If your agency has 20 channels and you want to encrypt all 20, \$150 times that 20 will bring you to what you would be responsible for. That is that \$96,000 broken out is \$150/channel.

Larson stated if I think of myself as a PSAP with his premise logger, Larson thinks a number of PSAPs have a back-up control station for their law main that is probably connected into it that has their law main traffic which would probably have CJI in it, so that would have to be encrypted. 9-1-1 phones sounds like your recommendation is to encrypt that, so your phone lines would have to be encrypted. And then if I am also doing screen capture, that would more than likely have CJI in it, so that would need to be encrypted as well. Larson thinks there is going to be a lot, or everything, would just need to be encrypted at the local level.

### 2021 Attendance Recap

Larson explained this is last year's attendance recap. Let us know if a meeting that you know you attended was not marked by accident and we can include that. Otherwise, you can take it back to your agency.

## **OLD BUSINESS**

### Logger Capacity

Larson does not have anything to add to that at this time.

### Limited Member Update

#### a. Washington County

Larson explained Washington County is still working on the process on the contract-side of things. Dar Pankonie joined the call. Pankonie joined because she did want to check. We are ready to go waiting to see when you were done with all that server movement? Larson replied that stuff has not finished out for us yet. Larson explained our City employees from City Hall are in a multitude of different working locations, so we have not moved our City Hall yet. Larson asked were you able to get the contract paperwork taken care of on your end? Pankonie replied the lawyer is going to look at it, Pankonie does not foresee any problems at all. Pankonie really was looking for a date timeframe that we were looking at. Larson cannot answer the timeframe at this moment right now, but we will not be able to move forward on any connection pieces until we do have contracts taken care of. Pankonie asked and you have all that stuff moved, yes? Larson replied contracts would be the next step, and then after that we will work on connections. Pankonie is confused, I thought you said we could not do it until that work was done. Larson replied it depends upon timelines of how the contracts take. And then we can communicate to give a better estimation, because it will be both Washington County and Sanford that will be a waiting for the connection step. Pankonie will communicate with you guys offline then and get this going.

#### b. Sanford Health EMS

Larson explained Sanford Health EMS is going to be looking to join here soon.

### Logger Update

Schultz reported we have continued to monitor the CDR call-taking issue. The patch has been installed at all required counties. One issue remains with the CDR at Otter Tail County. The CDR issue at Otter Tail is that it will work properly then on random intervals the CDR meta data will drop from the call tag. The frequency of this has been significantly reduced from the initial instance of the issue. We continue to work with Verint to resolve this issue. A vulnerability has been discovered involving log4j, which is a component of Java. As a precautionary measure, a patch has been released by Verint in which we took immediate action and reached out to the Central Region earlier this week to coordinate installation efforts. After coordinating with Larson, the log4j patches were applied to the Central MN regional equipment, secondary on Monday, the primary on Wednesday. Northland engineers have downloaded the required patches to every agency in the region. Our engineers were reaching out to schedule and apply the updates with the remaining agencies as there will be reboots of the servers during installation. Please note this was just a precautionary measure, no servers were in any way compromised. Yesterday evening, we were alerted by our 24/7 monitoring service of an outage on the secondary data center server and our team immediately responded and learned it was processing Windows updates. The secondary data center server automatically rebooted to apply these Windows updates. After further investigation, it appears the server was installing a critical patch. Our team of engineers will be working with everyone in the Central Region to apply these Windows updates as well. Our team coordinates Windows updates with everyone in the region once a month. There was no outage of recordings.

## **OLD BUSINESS (Continued)**

### Logger Update (Continued)

Wosje asked only because this happened just last night, Wosje is wondering why the Windows update was pushed out at that time, and is that something that we need to make the region aware of in the future. Leyde answered there was a time outage of 8 a.m. to 5 p.m. for Windows updates not to apply. It followed that. We are taking it a step further, so Windows does not install without our intervention, because we run those monthly. We feel that a group policy overrode what we set-up initially and that is something that our team will be in touch with on the City of St. Cloud side.

Larson asked the Windows update occurred on the secondary recorder, or on the secondary data center? Leyde replied just the secondary data center. We intervened last night, so it does not install automatically outside the working window hours. We have changed that and now we want to manually run those. Reboot those servers one by one. This came out since the work we did Monday and Wednesday this week. And we found it was a critical Windows update that got pushed out.

### Logger User Concerns

None.

### Open Discussion

None.

**Next Meeting:** February 11, 2022 – Microsoft Teams

## **Adjournment**

*Chair Larson made the executive motion to adjourn the meeting and the motion was carried unanimously at 12:02 p.m.*

Minutes recorded by Shari Gieseke.