STATEWIDE EMERGENCY COMMUNICATIONS BOARD
INTEROPERABLE DATA COMMITTEE

Chair: Mike Risvold
August 16, 2016

ATTENDANCE

Jackie Mines	Dept. of Public Safety	Melinda Miller
Jim Johnson	MN IT Services	Ullas Kamath
Jim Mohn/Tim Lee	Dept. of Transportation	
Dean Weis	Dept. of Corrections	Steve Ouradnik
Thomas Humphrey	Metropolitan Council	Vince Pellegrin
Brian Askin	Dept. of Natural Resources	vacant
Steve Bluml	Minnesota State Patrol	Tim Boyer
John Hyde	Minnesota Sheriffs' Association	vacant
Michael Risvold, CHAIR	Minnesota Police Chiefs' Association	vacant
Wayne Kewitsch	Minnesota Fire Chiefs' Association	Al Fjerstad
Mary Borst	Minnesota Ambulance Association	vacant
Vacant	League of Minnesota Cities	vacant
Mike Wisnieski	HSEM Region 4	vacant
Dave Deal, Vice Chair	Association of Minnesota Counties	Nate Timm
Vacant	Minnesota Indian Affairs Council	vacant
Jake Thompson	Metropolitan Emergency Services Board	Rod Olson
Kristen Lahr	Central Emergency Services Board	Brandon Larson
Brian Zastoupil	Northwest Emergency Communications Board	Beryl Wernberg
Ken Yurrick	Northeast Emergency Communications Board	Mark Stanberry
Brad Milbrath	South Central Emergency Communications Board	Andy Buckmeier
Rick Freshwater	Southeast Emergency Communications Board	Dave Pike
Stacy Tufto	Southwest Emergency Communications Board	Vacant

ALSO ATTENDING

Rick Juth, ECN
Carol-Linnea Salmon, ECN
Mark Navolio, Televate
Chad Steffan, Lower Sioux
Joe Reichstad, Metro Transit
Dave Sissor

CALL TO ORDER

Chair Risvold calls the meeting to order at 10:05 with no quorum.

DISCUSSION ITEMS

STATE PLAN REVIEW

Melinda Miller introduces the state plan review. The state plans will be coming from FirstNet sometime next year and it is important to be prepared to review our state plan and know how we can influence the build out. In reviewing the state plan template in the RFP, it looks like the area where we have the ability to make changes is in Section Four, which is the build out of the state radio access network plan. Included in the meeting materials is a spreadsheet with 37 requirements that are specific to Minnesota. Miller added comments on the spreadsheet about where the requirements are located in the RFP. Some items that are implied in Section Four but reside in other sections.

Miller notes that it has been about a year since the committee looked at this. She asks if people will look at the questions on the spreadsheet and send her responses along with any other comments. She adds that the committee will need to determine what the scope will be and how the items will be quantified. Mark Navolio from Televate will help the committee to numerically define some of these things. Some of it has to do with coverage and what the quality of the service is, what the uplink and down link are from the edge of the cell, etc. Some of it has to do with coverage and whether it happens on non-band 14 or on band 14. Minnesota put out some requirements about what kind of reporting the state wants. Miller would like to go through some of that to get a feel for the concerns that were around these requirements and if they still exist or if some of them were answered when the RFP was put out. She asks what some of the concerns surrounding reporting were and how FirstNet would let Minnesota know about quality of service. FirstNet refers to a quality assurance surveillance plan in the RFP.

Mark Navolio says the state plan can be divided into two parts. The opt-out scenario only has to deal with the Radio Access Network (RAN) which means the bay stations and backhaul to the EPC, the core network. That's where the state can affect the most change because if Minnesota opts out that is all that the state has control over. In 2015, Minnesota published a series of requirements that are pretty much end-to-end, from the core network to the RAN. Many of the launch requirements, in the document that came out of the workgroup, deal with a lot of the issues that come out of the core network, such as security, support for applications, and functionality of devices—things that are not part of the scope of an opt-out scenario. There are items in the state plan that we can provide advice to but FirstNet is under no obligation to follow. FirstNet is responsible for that part of the network and for the core and will be bringing devices to market. That is FirstNet's purview. Our purview is the RAN network and it is there that we are going to need feedback from this committee and the workgroup. The committee has developed coverage requirements and laid out five phases and a strategy for coverage. We termed it the bookends approach—simultaneous deployments in both rural areas as well as the heavily populated dense urban areas. On top of that, we added an objective of 95% coverage on a county-by-county basis. Those requirements are quantifiable. We have incident data, road count data, accident data on the rail lines, CAD data. We can use this data to judge

the sufficiency of the coverage from a statistical basis. We have a lot of tangible, statistical points that we can build into our analysis of the state plan. Most of the things I'm referring to are in Section 4 of the state plan. There are six other sections that FirstNet will provide for us. We would like to set up the criteria for evaluating the state plan. To do that, we want to leverage the same structure that we put together last time to generate our five-phased strategic build out. Last time we tapped the members of the IDC and we also made a request to the technical committees in each of the regions to offer up volunteers to set up those criteria. Our question to the committee today is do you think that is a good forum for setting up the evaluation criteria for FirstNet's state plans or not? Or do you think it should be the sole purview of the IDC or some other organization?

Miller says she thinks it is a good idea to include the IDC members and the people that were involved initially. She asked the RICs to let her know if there is anyone who was on the initial work group who does not want to be a part of it now and also if there are new people that would like to be added. She would like to hear the feedback from committee members if they think this is a good process.

Chair Risvold clarifies that Miller is suggesting to reconvening the original work groups.

Navolio says the first task we are going to take upon ourselves is to focus on the scope of our evaluation. The state plan is going to be a massive document. Our first step will be to look at the state plan document or at least the outline that FirstNet provided in the RFP and evaluate our priorities. The second step will be to evaluate how we will pass or disapprove each component of the state plan. For example, coverage—we might say coverage is a colored map but we also require more tangible information. We may want, for example, a prediction of the RSSI which will allow us to infer an availability of the network. We don't just want to see the extent of coverage but we want to see how much coverage is everywhere.

Wayne Kewitsch says that is an excellent idea. He can't imagine moving forward without knowing to a relatively high degree of certainty what the coverage will be.

Dave Deal says we also need details on the backhaul capacity.

Miller asks if we want to evaluate the backhaul separately from coverage.

Navolio says it is part of the RAN. We can include it and set parameters such as Deal has suggested. It affects the availability of the network as a whole.

Navolio says Receive Signal Strength Level (RSSI) is a very crude way of accessing service level for LTE. It's better to look at the quality of the received signal strength which takes into account the amount of noise in the environment. A lot of that depends up on the base assumptions of FirstNet. These prediction tools have to emulate traffic. We have given FirstNet a baseline of traffic and have shown them where the users are based on our CAD data. When FirstNet import that into their planning tool, they will be able to give us a lot more details. Not just the signal strength of the bay station. FirstNet will also be able to report how much noise is generated in the environment and how much those cell to trunk based on the traffic map we've provided.

Mike Wisnieski asks if there has been any consideration about the leaf-on and leaf-off which has a dramatic effect on the signal strength in a lot of the rural areas, especially in northern Minnesota. There are some areas that are completely dead in the summer.

Navolio says we have taken your CAD data and generated a user density map based on the worst case scenario in your county. We ask you when we publish those maps next month that you take a very close look to ensure that those populated areas that are very seasonal in nature are highlighted in red because that will affect the elasticity of the sight. The closer we put the sights to those areas of usage the better coverage we will get overall.

Navolio adds that that is one of the items we identified in the launch requirements. We were requesting a full-length budget. There were assumptions that were made from the enode B all the way up to the antennae and back down to the device that enter into whether it is a viable link. There are stade margins as well as losses for cables. All of that feeds into the ability of the network to provide that connectivity to that point.

Miller says as far as the link budget is concerned and the specifications, they don't have a lot in here about what is required. We probably need to quantify what is an acceptable level and is it worth opting out for.

Navolio says FirstNet might make a series of assumptions that might be detrimental to our ability to subscribe to the service in rural areas and one of the examples that has been floating is an idea that they would leverage on enode B in the trunk for some of the more rural agencies in order to provide localized service for surrounding agencies. There is obviously a cost factor and an operations maintenance cost factor there as well so all of that we need to set up as a point of evaluation prior to us receiving the state plan so we can be prepared to comment on it once we receive it.

Miller assumes that everyone on the IDC would like to be a part of this workgroup and please let her know if you do not. She is going to send an email to the people that were on the work group before and will include the spreadsheet that was in the meeting materials with a request for feedback. She will ask if they would like to continue and, if not, if they can suggest a replacement. She will send out to everybody who is a part of the evaluation working group Section Four where it talks about the different parameters where we might have influence and some of the questions that we had in our requirements and things we need to be thinking about.

Chair Risvold notes that a lot of the original members are subject matter experts and are important to the process.

At the next meeting, Navolio will give a presentation on the results of the CAD analysis.

ANNOUNCEMENTS

Chair Risvold welcomes Chad Steffan, from the Lower Sioux, who has joined the committee.

Miller says that she has discipline-defined presentation packets that include a small PowerPoint and some FirstNet handouts. These are available to anyone who would like to give a presentation about FirstNet. There is one for Fire, one for EMS, one for Law.

Meeting adjourns at 10:29 a.m.