Future Wireless Working Group Meeting Summary
February 8th via Zoom

Attendees

Amel Caldwell, Andrew Gallo (GWU), Andrew Wiedlea, Axel Persaud, Chris Hibbs, Glenn Rodrigues, Howard Pfeffer, Jaime, Jeff Reel, Jim Jokl, Jim Stewart - UETN, Joe Clary, John Simpkins, Leon Cruz, Marissa Kato, Mary Bull, Mike Atkins-ND, Nash Higgins, Richard Letts

Summary

Jeff confirming that Shawn had circulated the meeting minutes from the previous month and asked for any additions or corrections. Hearing none, he would post them to the group's public wiki space.

Jeff also shared the good news that the neutral host network RFP was now available and had received feedback from some groups that they intended to submit proposals. He mentioned that question and answers would be made publicly available, with a deadline for RFP responses on March 7th. Jeff elaborated on the details of the RFP that Internet 2 was looking for a provider and would ideally enter into a service evaluation phase with the successful RFP respondent. Jeff discussed the Request for Proposal (RFP) process, which was sent to 25 vendors, and emphasized the need to meet the submission deadline.

Jeff opened the floor for members of the working group to share their experiences, problems, and new discoveries. Mike Atkins from Notre Dame joined the working group and shared his team's experiences with different vendors, including Motorola, RF Connect, and Celona. Mike explained that they initially installed firewalls between everything due to uncertainty about network security but have since gained more trust. He also highlighted the importance of access to backend data for research purposes and the potential use cases they've explored, such as point-of-sale ticket scanners and neutral host systems.

Mike discussed the challenges the team was facing in implementing ticket scanning and Wi-fi solutions for guests at their venue. He mentioned that they were exploring alternatives like CCTV but funding was a concern. Glenn asked about the potential use of ticket scanning for the athletics team, and Mike explained the difficulties they were encountering with their current vendor. Mike also mentioned plans to upgrade the Wi-fi in the football stadium and the challenges they faced with concession vendors' point of sale devices. Glenn then shared his experiences with Wi-fi coverage at their own venue, highlighting issues with range and compatibility. It was clarified that the current ticket scanners were not CBRS capable.

Glenn and Mike discussed the use case for outdoor Wi-Fi in learning spaces. They highlighted the cost and potential of fiber installation to tents for events such as commencement ceremonies. Mike mentioned that the expenses could have been better allocated towards other areas like CBRS. They also discussed Wi-Fi consumption during graduation ceremonies, concluding that a

total of less than 10 megabits per second was needed, with an IPTV stream requiring approximately 5 megabits per stream. Finally, they considered the feasibility of installing 6 nodes to cover most of their campus, but decided to take on the task themselves to avoid further expenses.

Glenn and Mike discussed the progress of integrating Celona with their network and the implementation of e-SIMs on devices. Mike shared that they had enabled e-SIMs on Android and Apple devices, mainly for testing, and were in the process of integrating e-SIMs with RF Connect. They also discussed the potential challenges of handling multiple phone numbers and data-only plans. Glenn mentioned the upcoming feature of Geo-fencing in iOS 17, which could automatically transfer between the private id and the physical SIM. The conversation ended with Mike noting that their telecom group was working on a pilot project involving a Cisco phone number with an e-SIM provisioning.

Glenn and Mike discussed the transition from desk phones to a Team's platform. Mike shared concerns about previous issues with cellular-based call boxes, which left a bad impression on their telecom team. Despite this, Mike suggested the potential for using private cellular as an alternative solution for events and temporary call boxes. Mike also mentioned the possibility of using this technology for elevator phones. Jeff suggested using the mailing list to continue discussions and share experiences.

Jim discussed the ongoing project with Comcast, which involves testing 4G instead of the originally planned 5G due to the absence of the needed 5G MOCN components. He also mentioned the addition of Mosa radios and security cameras from [Mosa Labs](#) and [Horizon Powered](#) to the project. Jim also touched upon the challenges of network tuning between carriers and the need for precise details to ensure smooth handoffs. Mike inquired about network metrics, to which Jim responded that Comcast's main concern was ensuring regulatory compliance. Glenn asked about UVa's spectrum licenses, and Jim confirmed they were operating on UVA's CBRS PALs but that there is also GAA available in Charlottesville. Glenn also raised the topic of compatible cameras, to which Jim responded that Mosa Labs, via a gateway device, and Horizon Power provided cameras natively compatible with CBRS. Jim concluded by mentioning that they have specific contract stipulations preventing carriers from using certain frequency bands on university property.

Glenn and Jim discussed the potential risks and considerations of their network infrastructure, including the impact of an outage and the implications of lost connectivity. They also touched on the topic of E911 call routing and its testing, with Jim noting that carriers are particularly concerned about its functionality. They concluded that while they are responsible for providing exact location information, the actual implementation of E911 and its associated services falls to the carriers.

Jeff expressed appreciation for the technical contributions and thanks those involved in the RFP process.

Marissa brought up the topic of infrastructure and the need to revamp campuses' cabling infrastructure to support 5G cellular services. Jeff will put the topic on the agenda reminder for

their next scheduled meeting in March, which will be held after the Internet2 Community Exchange. Jeff also mentions that there were three back-to-back conversations on private wireless at the event. The team thanks everyone for their participation and appreciates their contributions to the project.

Addenda:

This link was included in the meeting chat
https://www.ctcnet.us/analytics/us-cbrs/