

REFINITIV STREETEVENTS

EDITED TRANSCRIPT

VZ.N - Verizon Communications Inc at Wells Fargo TMT Summit

EVENT DATE/TIME: NOVEMBER 28, 2023 / 4:45PM GMT

CORPORATE PARTICIPANTS

Joseph J. Russo *Verizon Communications Inc. - Executive VP & President of Global Networks and Technology*

CONFERENCE CALL PARTICIPANTS

Eric Thomas Luebchow *Wells Fargo Securities, LLC, Research Division - Associate Analyst*

PRESENTATION

Eric Thomas Luebchow - *Wells Fargo Securities, LLC, Research Division - Associate Analyst*

Good morning. All right. Good morning, everyone. We'll go ahead and get it kicked off. I'm Eric Luebchow, Senior Analyst at Wells Fargo, covering Telecommunications Services and really pleased this morning to be joined by Joe Russo. He's the EVP and President of Global Networks and Technology at Verizon. So Joe, thanks for joining us.

Joseph J. Russo - *Verizon Communications Inc. - Executive VP & President of Global Networks and Technology*

Eric, thanks for having me. Appreciate it.

Eric Thomas Luebchow - *Wells Fargo Securities, LLC, Research Division - Associate Analyst*

And I know you have to get some safe harbor language out of the way. So we'll go ahead and -- go ahead and do it.

Joseph J. Russo - *Verizon Communications Inc. - Executive VP & President of Global Networks and Technology*

Yes. Well, I suspect I will be making some forward-looking statements regarding future events and financial results. So those are subject to risk and uncertainty. So I would draw your attention to our safe harbor statement on the Investor website.

QUESTIONS AND ANSWERS

Eric Thomas Luebchow - *Wells Fargo Securities, LLC, Research Division - Associate Analyst*

Perfect. So to kick it off, Joe, maybe we could talk about kind of the state of your mid-band 5G network. I know that's been a big transformation for Verizon in the last couple of years. And you've deployed a lot of the spectrum in a lot of the denser urban areas, and you just got access to some of the B and C block, C-band market. So maybe you could kind of walk us through where you're at in terms of the upgrade path and what the next couple of years will look like as you push the 250 million POPs coverage and beyond.

Joseph J. Russo - *Verizon Communications Inc. - Executive VP & President of Global Networks and Technology*

Okay. Before I get into the specifics on C-band, I've been with Verizon 28 years, but been largely running operations. So I haven't met you or many of you in the audience. So they don't let us operations guys out very much. But in the new role, I'm pleased to represent Verizon.

And as I talk for the next half hour about all the different things we're doing, one of the things I wanted to make sure that I hit right up front is I think Verizon takes a unique approach to building any networks, whether it's our C-band or millimeter wave, our Fios platform, our core, et cetera. And we're a very mission-oriented team. And I'm a very mission-oriented leader.

Our mission is to connect people. And we do that by building the best, most reliable, highest-performing and secure networks. And we make tons of investments in lots of different ways to make sure that we're the best at doing that.

C-band has been a great tool in that toolbox. And as you said, we, I think, just announced we're crossing 230 million POPs covered. But I will reinforce that POPs covered isn't exactly my goal. My goal is to get capacity and performance into the network where customers want to use it when they need it, where they need it and C-band has been great.

So I suspect over the next couple of quarters, we'll blow past the 250 million POPs covered. But we'll do that in a way that our customers see the difference in performance and reliability. And it's been a great tool to kind of build our Ultra Wideband Network across the nation.

Like you said, we started in the dense metro areas in the top 46 PEAs. We quickly moved to the 76 PEAs and now that we have access to all 406, we're starting to spread that C-band build out into the suburban and rural areas right now.

Eric Thomas Luebchow - Wells Fargo Securities, LLC, Research Division - Associate Analyst

And in terms of coverage, one of your peers has talked about mid-band covering around 300 million people, I guess. What are the goals to drive coverage into increasingly rural areas maybe beyond 250 million people? Is that going to be more on a success base depending on use cases or opportunities you see in more rural parts of the country to deliver some of the solutions. We'll talk about more like fixed wireless?

Joseph J. Russo - Verizon Communications Inc. - Executive VP & President of Global Networks and Technology

Yes. Our goal is to deploy C-Band on our existing macro network in all 406 PEAs. So that will happen over the next couple of years. And again, we'll follow where customer demand is. So where we see we need capacity, coverage or capabilities in the network, that's where we'll target next. And largely success in places where we think we can win share in fixed wireless access. That's another area that will target C-Band.

But over the next couple of years, we'll be rolling out into the more suburban and rural areas with the intent of really covering our existing macro network with C-Band.

Eric Thomas Luebchow - Wells Fargo Securities, LLC, Research Division - Associate Analyst

And as you look at the performance in terms of subscribers in your C-Band markets versus your non-C-Band markets, maybe you could talk about some of the trends you see in terms of successes you've had in terms of subscriber growth. Because I know Verizon does have a goal to kind of improve, especially in their Consumer division, some of the net subscriber growth.

Joseph J. Russo - Verizon Communications Inc. - Executive VP & President of Global Networks and Technology

Yes.

Eric Thomas Luebchow - Wells Fargo Securities, LLC, Research Division - Associate Analyst

So maybe you can talk about the differences you see. So as you roll out more C-Band and one of the opportunities, of course, might be to improve the subscriber trajectory in the next couple of years.

Joseph J. Russo - Verizon Communications Inc. - Executive VP & President of Global Networks and Technology

Yes. So Sampath, Kyle and I worked very closely together to make sure that we're in lockstep about building the network that they can sell and bringing more and more capacity and coverage to customers who can be on the Verizon experience. It's one of the reasons earlier this year, Sampath and I aligned our market structure so that my network team and his sales teams are locally operating.

It's the way we operated the business several years ago. We stepped away from it, and we've gotten back to it. And we've seen great progress in our ability to grow the business as a result, specifically for Ultra Wideband both for millimeter wave and for C-Band, we see that customers are really loving that experience. And we see better churn. We see better step-ups. So more customers taking our premium plans because they want access to the Ultra Wideband experience and we're seeing better gross adds in those markets as well.

So we like the trajectory we're on and we'll continue to build out. And I think that gives us more and more capability to bring more and more customers on the Verizon experience.

Eric Thomas Luebchow - Wells Fargo Securities, LLC, Research Division - Associate Analyst

Okay. Great. That's good to hear. So one of the use cases that has been adopted by yourself and some of your peers, fixed wireless has been a bit, kind of a game changer in the broadband industry the last few years. And you clearly have brought on a tremendous amount of spectrum capacity, especially with C-Band. At the same time, those use cases do chew up a lot more bandwidth in the typical smartphone users, I'm sure.

Joseph J. Russo - Verizon Communications Inc. - Executive VP & President of Global Networks and Technology

Yes.

Eric Thomas Luebchow - Wells Fargo Securities, LLC, Research Division - Associate Analyst

You look at every day. So maybe you could talk about managing network capacity where you have to manage the 20% to 30% growth in just general smartphone usage on top of a new use case that's really incremental to Verizon in the last couple of years, at least in a big scaled way.

Joseph J. Russo - Verizon Communications Inc. - Executive VP & President of Global Networks and Technology

Yes. So when we started deploying 5G Ultra Wideband even with millimeter wave, it became very apparent, we had to get really good at managing a radio access network that was now going to be more multipurpose. And you could say it was multipurpose before fixed wireless access, but it was largely low end multipurpose IoT, et cetera, and mobility, right?

And with fixed wireless access, building the capabilities early on were a key point that we wanted to make sure we differentiated ourselves on. So we've done a lot in our organization to build capacity management tools and models that allow us to manage that RAN network in a new way.

I'm very proud of the way the team has done that, and I think it differentiates us. It gives us the ability to really maximize the spectrum we're able to put into the network and balance what customers need, when they need it. The time of day is different between fixed wireless access and mobility. So having sophisticated models that maximize that spectral efficiency by making sure -- but making sure that our customers are getting a level of performance that we defined very early on.

That said, we know we need to deliver this level of performance for mobility and this level of performance for fixed wireless access use cases. So that customers could do what they wanted to do. And then we backed into, okay, so that's how we can run this network. And every single sector is different and we manage it differently based on the [RF] conditions, the user profiles, et cetera. And we really like the trajectory that we're on in managing those use cases that we're putting on, on the Ultra Wideband Network.

Eric Thomas Luebchow - Wells Fargo Securities, LLC, Research Division - Associate Analyst

And most of your success in fixed wireless because of where mid-band has been deployed has been in more dense urban market.

Joseph J. Russo - Verizon Communications Inc. - Executive VP & President of Global Networks and Technology

Yes.

Eric Thomas Luebchow - Wells Fargo Securities, LLC, Research Division - Associate Analyst

But as you broaden coverage to more suburban areas, more rural areas, I have to imagine there's a lot of competitive opportunity there, right? There aren't as many competitors in America, who are operating in this fixed broadband. So maybe you talk about kind of the shape the subscriber curve as you broaden the network out in the increasingly rural areas?

Joseph J. Russo - Verizon Communications Inc. - Executive VP & President of Global Networks and Technology

Yes. And Sampath and I are really trying to build a long-term sustainable business here. We've said many times, I'll say it again, we're targeting around 350,000 to 400,000 net adds a quarter. And we think we have a long runway to continue that level of performance each quarter. As we use the spectrum we've already deployed and as you've said, start to expand into new markets into more suburban and rural. We think that, that trajectory lines up with my build plans and our capital envelope. So we like where we're at. And we think the customers are getting a great experience, and we continue to grow that business to create that long-term sustainable revenue.

Eric Thomas Luebchow - Wells Fargo Securities, LLC, Research Division - Associate Analyst

You have 200 megahertz of spectrum in some of these rural markets, right?

Joseph J. Russo - Verizon Communications Inc. - Executive VP & President of Global Networks and Technology

Yes.

Eric Thomas Luebchow - Wells Fargo Securities, LLC, Research Division - Associate Analyst

That's a lots, a lot of bandwidth we can flood on the network.

Joseph J. Russo - Verizon Communications Inc. - Executive VP & President of Global Networks and Technology

Yes, definitely. And that gives me great opportunity to balance, right? Because today, the mobility use cases, they don't need that kind of throughput. So fixed wireless access is a great place.

The other thing I'll add, though, is we're seeing more and more enterprises look to us to use fixed wireless access, both for backup and primary connections. And to your point, these businesses, if they have branches all around the country, they want access to that kind of throughput in all of the branches. So as we continue to roll out fixed wireless access beyond the suburban and dense urban areas, it gives us more and more opportunity to also capture some of the enterprise use cases as well.

Eric Thomas Luebchow - Wells Fargo Securities, LLC, Research Division - Associate Analyst

No, that makes sense. So I wanted to touch on millimeter wave spectrum. You were one of the earliest proponents of millimeter wave years ago. And obviously, C-Band and mid-band spectrum seem deservedly to get a little more attention a couple of years just because they have slightly better propagation characteristics.

But maybe you could update us on your millimeter wave network and where you're at today in terms of offloading traffic, especially for the really high bandwidth use cases, especially in dense metro areas off of the mobile network and where you're at in that process?

Joseph J. Russo - Verizon Communications Inc. - Executive VP & President of Global Networks and Technology

Yes. And we love our millimeter wave spectrum. We're using it in new and different ways than we even thought of few years ago. As you said, it's a great tool in our toolbox to handle capacity and to allow customers to do things they never could do before in certain areas.

And at first, we focused on venues and dense urban areas. But now we're starting to use it in many different areas, beaches, in open air venues, in downtown urban areas to really give customers the kind of experience that they couldn't do in those kind of -- where lots of people gather and they wanted to do things.

I joke with my kids more than anything. But if you've been to a Taylor Swift concert, all of those people, our customers are there, and they want to stream that experience with their friends and family, and you couldn't do that in a 4G world. There just wasn't a kind of capacity and we have found that we've enabled and unlocked that capability in venues with millimeter wave. There's no way we can deliver that kind of experience for our customers without millimeter wave.

The same would be true at the beach. If you want to stream video, play games, watch things at the beach when especially, the Jersey Shore. I don't know about here in California, but there's thousands of people, all congregated in the same place. Millimeter wave is a great tool to meet those demands.

Eric Thomas Luebchow - Wells Fargo Securities, LLC, Research Division - Associate Analyst

That's very helpful, Joe. So I also wanted to touch on your fiber footprint. So Verizon has been building fiber for 20 years at this point, right? You were building fiber before it kind of became cool. As I like to say, really one of the first movers with your Fios network.

More recently, you did your One Fiber build, which was more outside of your incumbent footprint in over 60 markets. So maybe you could give us an update on where you're at in your fiber build. I think you're still building about 0.5 million new Fios homes per year. I think you're mostly done with the core build on One Fiber and a lot of the remaining CapEx will be more success-based. But maybe you can kind of walk us the journey, the evolution and what the future could look like in fiber build.

Joseph J. Russo - Verizon Communications Inc. - Executive VP & President of Global Networks and Technology

Yes, let's unpack it a bit. I think you got most of the points already. But for those of you who may not know, Eric, you may not know, but 20 years ago, I was asked to serve on the team to try and figure out how to bring fiber to people's homes or originally, we didn't call it Fios back then, but we came up with that name. But I take great pride in our Fios footprint. We took a lot of lumps early on for those decisions. I remember many times our CFO wondering what are we doing.

But we have a premier product in the Northeast and our customers love it. We have great market share and we continue to grow that part of the business. As you said, we plan to continue to add around 0.5 million customers open for sale a year in our Fios footprint. And that's a combination of funding that I'll allocate to the team to expand beyond where we've already deployed the \$17 million that can get it. And some of the BEAD

funding as well that we have several bids out in that space, and we think we could be very successful with BEAD funding as well. We're getting to places that we normally wouldn't have built before.

If I think out of footprint, we are largely done with our core build of the One Fiber markets, which was great timing because it allows me and Tony to bring down the capital for 2024 but not slow down on our Ultra Wideband builds because I could reallocate some of that fiber out of footprint allocation to our Ultra Wideband build and keep on pace and to some extent, accelerate as we go into '24 and '25. And it's -- at this point, it's mostly where we're building new macros or small cells, and we need fiber off of the core. We'll add those tails to the core, but largely the core is now built. So we don't have to go back and make that big investment.

Eric Thomas Luebchow - Wells Fargo Securities, LLC, Research Division - Associate Analyst

And it's also saved you a significant amount in backlog expenses as well, right?

Joseph J. Russo - Verizon Communications Inc. - Executive VP & President of Global Networks and Technology

Yes.

Eric Thomas Luebchow - Wells Fargo Securities, LLC, Research Division - Associate Analyst

I think you quantified it as \$1 billion plus of savings on the Analyst Day years ago...

Joseph J. Russo - Verizon Communications Inc. - Executive VP & President of Global Networks and Technology

Yes. We love the owner's economics for sure. And the other thing that we don't talk much about, but I guess this is my operational background. I love the operational excellence it gives me. Part of the places we chose were places we felt like we needed a better experience as well and to be faster to market.

And right now, with the fixed wireless access product, some of the enterprise use cases, having 10 gig plus backhaul to the cell sites is critically important. And where I have my own fiber and I own the electronics as well, right? That's an evening upgrade versus potentially weeks or months of dealing with a third-party provider. So we love not only the owner's economics, but the operational excellence we get from having more than half of our cell sites on our own fiber.

Eric Thomas Luebchow - Wells Fargo Securities, LLC, Research Division - Associate Analyst

Yes. If we touch on kind of small cells and densification needs over the next couple of years, you've been one of the more aggressive small cell developers in the carrier space, especially in the more densely highly populated areas. Understandably, you've probably pivoted a little bit more towards macro tower upgrades as you upgraded your C-Band network the last few years. But as we look out into the future, now that you're progressing pretty far along the macro tower upgrade path, can we expect a little bit of a shift to densification where small cells, particularly in dense urban areas become bigger part of the equation?

Joseph J. Russo - Verizon Communications Inc. - Executive VP & President of Global Networks and Technology

Yes. I would -- right now, we're kind of on a steady path of adding macros and small cells to densify the network where we see capacity or coverage needs. In the next couple of years, to your point, I think we have a lot of build-out on the macro [mods] to add C-Band. That is our primary focus for our capital dollars.

I'm not sure that beyond that, I see a real need to further densify. But I would say it's a watch and see, to some extent, right? It's what type of new use cases, both in the enterprise or the consumer or the B2B2C that requires some form of a network upgrade that would require densification. It's a tool that we use right now, mostly for coverage and capacity. But we definitely are starting to dream a little bit about what does the future 5G Ultra Wideband Network look like? But I think it's going to be more use case driven. That would say we have to go beyond our kind of normal cadence of expansion.

Eric Thomas Luebchow - Wells Fargo Securities, LLC, Research Division - Associate Analyst

And as you do look to do some incremental densification selectively, I mean, do you prefer to build on your own fiber network or in some cases, where it makes sense, will you lease capacity from a third party like a Crown Castle or an ExteNet or someone like that?

Joseph J. Russo - Verizon Communications Inc. - Executive VP & President of Global Networks and Technology

Yes, we do both, right? There's kind of 3 models. If we're in our core networks or if we're in our ILEC, those are the first 2, where we have our own fiber, we'll use our own fiber, especially if it's close enough to the core that it makes sense. But where it's not, and in many cases, a little less than half or so, we do go to third parties, and we will use them, whether it's the tower companies like Crown or the Lumens or AT&Ts or others of the World.

Eric Thomas Luebchow - Wells Fargo Securities, LLC, Research Division - Associate Analyst

Yes. So I wanted to touch on kind of new 5G use cases. It's something that Verizon has talked about the last couple of years. And I think you've acknowledged that the ecosystem has taken a little longer to develop than you initially thought. But it seems like a lot of the excitement is really more in the enterprise space, even more so than the consumer space.

So maybe we can kind of touch on enterprise 5G use cases, mobile edge compute and private networks are the 2 that you've talked about the most. And it seems like private networks are maybe the area that Verizon is the most excited right now. But I wanted to get your temperature check on that.

Joseph J. Russo - Verizon Communications Inc. - Executive VP & President of Global Networks and Technology

Yes, I think we're seeing a few things. Number one, the private network space is really building. And the reason I say that is more and more customers that Kyle and I meet with are either have a deployment that are now coming back saying, hey, we didn't realize how many problems this actually solves for us, and we'd like to do more.

And then by having those deployments in place at ports, at manufacturing facilities, at NFL stadiums, now we're able to also show other companies, these are the kind of problems we're solving. So if you have these kind of problems with a fixed or a WiFi network, private networks are the solution. We've proven them out. Lot of customers are doing kind of test cases to check us a little bit, but that momentum is definitely building.

And I think originally, we thought MEC was kind of going to lead and private networks would follow, and we've seen the reverse. Now that people are getting private networks, and we're solving those kind of fixed or WiFi solutions or problems that they had with a private mobile solution. They're now saying, oh, well, we want our data to be more secure? We want lower latency or we want on-prem integration with our HR systems, et cetera, and we're building those capabilities with MEC applications that are following the private networks.

So that's how we're seeing that evolve. And Kyle is really gaining a lot of momentum in that space. And I'd love just seeing the problems get solved that you couldn't do with either WiFi or fixed networks in these kind of environments.

Eric Thomas Luebchow - Wells Fargo Securities, LLC, Research Division - Associate Analyst

Interesting. Because I know you've had some recent wins. I think Cleveland Clinic, I think NFL coach to coach communications, interesting new use cases that at least were published that we saw. So do you think it's going to take another couple of years for private networks to really scale? Or are you really starting to see some momentum?

Joseph J. Russo - Verizon Communications Inc. - Executive VP & President of Global Networks and Technology

I would say we're seeing momentum going into '24. The scale of it, I would say we still have a lot to learn about how big it gets, but we are definitely seeing momentum build going into 2024. The pipeline is very robust. And if you think about coach to coach as an example, the NFL entrusted us with a very critical part of their game day experience because there -- you couldn't do it without a private network.

And now they're coming to us asking for other use cases. They're a classic example of saying now that we have the private network in place and they see the power of it, they're talking about also to other on-field and back office applications that I think you'll see over the next few quarters.

Eric Thomas Luebchow - Wells Fargo Securities, LLC, Research Division - Associate Analyst

And if we talk about mobile edge compute, or multi-access edge compute, however you want to define. As you said, maybe that could be an interesting follow-on opportunity for private networks. You have partnerships with all the large hyperscale cloud companies. Maybe you could talk a little bit about that ecosystem. It's taken a little bit longer to develop, but what the opportunity set is specifically for Verizon, partnering with a lot of the cloud companies and where you see the future of that business?

Joseph J. Russo - Verizon Communications Inc. - Executive VP & President of Global Networks and Technology

Yes. I see it in 2 ways. One, we just talked about, which is where private networks are looking for more control, more security, more on-prem data processing. And we have a great lineup of capabilities with our partners to offer that kind of solution and really industry-leading experience in doing that.

The other one that's a little bit more kind of -- we haven't seen it materialize yet is what I would recall the low latency mobile use case, right, which is in an Ultra Wideband environment, I now have the capability to deliver high throughput, low latency. And if you couple it with MEC, in the local SAP or TAP location, close to the edge of the network, I think there's a lot of B2B2C and other use cases that could leverage that technology.

Again, we haven't seen the devices and the ecosystem emerge yet, but it is absolutely something we're preparing for because we think it will be another way to leverage the capacity and low latency that we're able to put into the hands of customers.

Eric Thomas Luebchow - Wells Fargo Securities, LLC, Research Division - Associate Analyst

And since we're at a tech conference, I'd be remiss if I didn't ask about the buzzword of 2023, which is Generative AI. And clearly, companies like NVIDIA and ChatGPT have been very disruptive in the market, have gotten a lot of headlines. So maybe how does a mobile 5G operator play into the evolution of some of the new Generative AI use cases that are on Verizon. I realize that's a very big picture question, but we get asked about that sometimes, and curious to get your take.

Joseph J. Russo - Verizon Communications Inc. - Executive VP & President of Global Networks and Technology

I would say, generally, what we're focused on right now is -- and when we think of Generative AI, it's at the end of the spectrum that we've been -- this journey we've been on around big data, machine learning, et cetera. So we're more focused, I would say, at this point internally which is how do we leverage these new capabilities to either run more high-performing, more reliable networks or we use them in customer experience.

We use them in our digital experiences. So there's been a lot of work we've done up till now in our SON platform, our self-optimizing network platforms to leverage these kind of new capabilities. Our predictive models, our capacity management models, all of these things where we're leveraging the capabilities of the spectrum of big machine learning and big data.

Yet to see how it evolves as far as use cases where Generative AI is more of a real-time mobility use case. I could certainly see how it could evolve over time where customers want on their devices, Generative AI that happens real time as they're walking around and experiencing things. We'll see how that evolves. But my job is to make sure I'm building the kind of capabilities in the network with Ultra Wideband and MEC and low latency to be able to serve those kind of use cases in the future. We'll see if they evolve. I certainly hope they do.

Eric Thomas Luebchow - Wells Fargo Securities, LLC, Research Division - Associate Analyst

Sure. Sure. Yes, it will be interesting to watch. So I wanted to touch on your spectrum portfolio. Obviously, you're still building out C-Band, so you have a lot of runway. But in the wireless business, you can never have too much spectrum, right? It's a critical resource. It's a finite resource. So maybe you could talk about opportunities beyond just deploying C-Band, whether that's reforming spectrum from 4G to 5G. And then maybe longer term, opportunities to get additional spectrum, whether that's mid or high band, how you kind of look at the spectrum landscape today and what it might look like over the 3 to 5 years?

Joseph J. Russo - Verizon Communications Inc. - Executive VP & President of Global Networks and Technology

Yes. I would say the good news is we've never been in a better spectrum position. But as you said, I -- some of you may remember a guy named Lowell McAdam, who I used to work for, who used the joke that if he ever meets an engineer who doesn't want more spectrum, that engineer is probably well-suited for a project management job.

So to your point, right? So I love the spectrum holdings we have. I think we have a lot of runway to get them deployed in the hands of customers. But there's 2 things I would say that just -- all of us need to continue to work on, which is I don't think as a country, we do a good job of efficiently utilizing our spectrum resources. I think there's lots of examples of that, that I have personal experience with.

And then we talk a lot about just spectrum pipeline. So I really applaud that the White House, the recent announcement they made to explore putting some spectrum up for auction potentially, in the mid-band, et cetera. I think that acknowledges the importance of it. And I appreciate that they've done that.

But I think there's a lot more work to do for the U.S. to build a really healthy and robust long-term pipeline of where this industry needs to go, recognizing that we believe that when you put licensed spectrum in the hands of operators like Verizon, it grows our industry. It gives customers great connectivity and allows for new use cases and new industries to emerge.

So we think there's a lot of work to do to kind of build that long-term pipeline. But I'm very pleased with where we're at right now, and I got a lot of work to do to get it in the hands of our customers across the country.

Eric Thomas Luebchow - Wells Fargo Securities, LLC, Research Division - Associate Analyst

And the industry has obviously evolved as well where you can put better technology into the networks to improve propagation because I remember when I first started at the industry, low-band spectrum was the crown jewel of the 4G network.

And now we're increasingly talking about higher and higher bands of spectrum that we never thought would be put on macro network. Talk about what you're doing from a technology standpoint, whether it's massive MIMO, or (inaudible), some of the ways that you can generate much better performance out of a mid-band network than you could have 5 to 10 years ago to help expand the reach of 5G.

Joseph J. Russo - Verizon Communications Inc. - Executive VP & President of Global Networks and Technology

I really appreciate the question because a lot of times, we just talked about the number of sites or the amount of spectrum that you have. But to your point, there's a lot that goes into building the best network and it starts with building the best network with the best technology.

And we partner with our manufacturers to make sure that we're getting the best technology out in the hands of customers. So to your point, we have the latest and greatest technology around massive MIMO. And we're doing a ton of work to make sure that we're on the leading edge of that, and we're utilizing the spectrum very efficiently and effectively and getting the most out of every hertz.

And I think that's a key part. It also is a lot about optimizing as well, and I don't think we talk enough about that. It's why I invest in the 3,000 people that live, work and play, where our customers live, work and play, who are testing the network each and every day and optimizing each sector for where the usage has been and where it's going. And that's another key point in just making sure that you're efficiently and effectively delivering the kind of reliability and performance for customers. It's not just necessarily the spectrum you put on the radio or on the tower.

So there's a lot of work going on. It's also -- and I'm not sure I want to bridge to this, but it's also why I get a lot of questions around O-RAN. And we're very supportive, and we're doing a lot of work to develop that ecosystem. But if I look at the performance of the O-RAN at this point, it can't do the kind of things like massive MIMO at 16T/16R that -- 64T/64R, those kind of performance measures, we're just not there yet. And until we are, it doesn't have a place necessarily in the kind of performance that I want to deliver to my customers. So -- and that goes for a lot of different things. We're always focused on, can this deliver an incremental performance lift for the customers.

Eric Thomas Luebchow - Wells Fargo Securities, LLC, Research Division - Associate Analyst

Okay. That's a helpful overview. So I wanted to touch on a topic you mentioned earlier, which is BEAD and some of the rural broadband subsidy programs that are out there, and there's obviously more than just BEAD. There's been the Cares Act, the American Rescue Plan Act. There have been a lot of state initiatives to deploy broadband in harder-to-reach areas.

So maybe you can talk about that opportunity set, how you evaluate it. Obviously, you have to make an appropriate return in some of these areas. I know some of these more rural areas are much harder to build in, much lower population densities, maybe topography, that's a little more dense metro area. So how you evaluate the opportunity to build broadband into increasingly rural areas?

Joseph J. Russo - Verizon Communications Inc. - Executive VP & President of Global Networks and Technology

Yes. So first, I'll just frame it. Right now, we look at that from a fiber perspective, only in our ILEC footprint because we think we have the infrastructure and the competitive advantage to make competitive bids. And to get that return that you talked about.

So we're focused on the ILEC footprint. When it comes to fiber, we definitely think there's a space outside of the ILEC footprint for fixed wireless access but there hasn't been such an appetite for that just yet. We'll see how that evolves with these funding rollouts because I believe that there are places in this country that for -- no One Fiber is going to be the answer, it just won't make sense. And I think fixed wireless access is a great alternative for those customers to get broadband. So we'll see how that evolves.

But if I think about inside the ILEC footprint, we largely look at each case individually, right? And it's a pretty complicated model that we have built to make sure that we're being aggressive on our bids, but we're also making a good return based on penetration, based on competitiveness in the area, based on how much work we think we have to do, how many homes will we pass beyond the ones that are underserved or unserved, all that goes into the model. And then if we feel like it's right for us, we'll bid on it, and we ask for a certain percent. We've been very aggressive in trying to make sure we balance what we're asking for versus what we're willing to put up ourselves to make the whole case work for everybody.

Eric Thomas Luebchow - Wells Fargo Securities, LLC, Research Division - Associate Analyst

And I assume part of the equation as well is when you bundle whether it's fixed wireless or fiber broadband with your smartphone and mobile network, that's a better outcome for you as well in terms of customer retention, able to sell additional services. So part of the equation in areas where maybe you can -- you might be able to improve your smartphone penetration? Does that kind of work its way into the calculus of...

Joseph J. Russo - Verizon Communications Inc. - Executive VP & President of Global Networks and Technology

It is part of the calculation. Do we think we can improve churn in the area on mobility if we bring broadband in? It's not a huge part of the equation, but it definitely is part of the factor we look at.

Eric Thomas Luebchow - Wells Fargo Securities, LLC, Research Division - Associate Analyst

Yes. And I guess just right before we finish up, I mean, we spent a lot of time talking about 5G use cases for the enterprise. Are there any consumer applications or use cases you see on Verizon that could be a game changer for mobile 5G or anything you're excited about?

Joseph J. Russo - Verizon Communications Inc. - Executive VP & President of Global Networks and Technology

The one thing that I'm seeing more and more development on -- because generally, in the consumer space, the devices haven't changed that much dramatically. There haven't been significant innovations in the device space. But I am definitely seeing more and more innovation in wearables, especially in glasses type environments.

And whenever I look at or get invited to see some of these new technologies that people are coming up with, they're struggling with this idea where I think they're a little bit stuck in a 4G world where they feel like they have to tether the device or they struggle with, what can they do in a real mobile environment to create an AR experience with wearables.

And I do think with the Ultra Wideband Network Verizon is building where we have high throughput, low latency, I think some advancements in RedCap, et cetera, that we'll see coming, hopefully change a little bit of the dynamics that allow for those kind of wearable devices to really take shape in the mobile environment. So I'm excited about that. We'll see how it evolves. I can't make a prediction on it. But I would like to see some more innovation in the device space that capitalizes on the Ultra Wideband experience we're building.

Eric Thomas Luebchow - Wells Fargo Securities, LLC, Research Division - Associate Analyst

I think that's a good place to leave it. So Joe, thank you for joining us today.

Joseph J. Russo - Verizon Communications Inc. - Executive VP & President of Global Networks and Technology

Thank you. Appreciate it.

Eric Thomas Luebchow - Wells Fargo Securities, LLC, Research Division - Associate Analyst

Thank you.

DISCLAIMER

Refinitiv reserves the right to make changes to documents, content, or other information on this web site without obligation to notify any person of such changes.

In the conference calls upon which Event Transcripts are based, companies may make projections or other forward-looking statements regarding a variety of items. Such forward-looking statements are based upon current expectations and involve risks and uncertainties. Actual results may differ materially from those stated in any forward-looking statement based on a number of important factors and risks, which are more specifically identified in the companies' most recent SEC filings. Although the companies may indicate and believe that the assumptions underlying the forward-looking statements are reasonable, any of the assumptions could prove inaccurate or incorrect and, therefore, there can be no assurance that the results contemplated in the forward-looking statements will be realized.

THE INFORMATION CONTAINED IN EVENT TRANSCRIPTS IS A TEXTUAL REPRESENTATION OF THE APPLICABLE COMPANY'S CONFERENCE CALL AND WHILE EFFORTS ARE MADE TO PROVIDE AN ACCURATE TRANSCRIPTION, THERE MAY BE MATERIAL ERRORS, OMISSIONS, OR INACCURACIES IN THE REPORTING OF THE SUBSTANCE OF THE CONFERENCE CALLS. IN NO WAY DOES REFINITIV OR THE APPLICABLE COMPANY ASSUME ANY RESPONSIBILITY FOR ANY INVESTMENT OR OTHER DECISIONS MADE BASED UPON THE INFORMATION PROVIDED ON THIS WEB SITE OR IN ANY EVENT TRANSCRIPT. USERS ARE ADVISED TO REVIEW THE APPLICABLE COMPANY'S CONFERENCE CALL ITSELF AND THE APPLICABLE COMPANY'S SEC FILINGS BEFORE MAKING ANY INVESTMENT OR OTHER DECISIONS.

©2023, Refinitiv. All Rights Reserved.