

REFINITIV STREETEVENTS

EDITED TRANSCRIPT

VZ.N - Verizon Communications Inc. at Wells Fargo TMT Conference
(Virtual)

EVENT DATE/TIME: DECEMBER 01, 2020 / 2:20PM GMT

CORPORATE PARTICIPANTS

Brady Connor *Verizon Communications Inc. - SVP of IR*

Kyle Malady *Verizon Communications Inc. - Executive VP & CTO*

CONFERENCE CALL PARTICIPANTS

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

PRESENTATION

Unidentified Participant

Welcome to the Wells Fargo TMT Summit 2020. Your session will start momentarily. Please note, this session will be recorded.

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

Good morning, everyone. I'm Eric Luebchow, senior analyst in communications infrastructure and telecom services. I'm very pleased this morning to have Verizon here. We have Kyle Malady, CTO of Verizon. Kyle, thank you so much for joining us.

Kyle Malady - *Verizon Communications Inc. - Executive VP & CTO*

It's great to be here, Eric. Thank you.

QUESTIONS AND ANSWERS

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

Yes, of course. So it's obviously an exciting time for Verizon. You recently launched kind of nationwide 5G on your DSS. So maybe you can talk about what you've seen in the relatively early stages of DSS. How it compares to kind of your ultimate 5G goals. And then also relative to your 4G LTE network in terms of speeds and latency and some of the other key network factors to take into account.

Kyle Malady - *Verizon Communications Inc. - Executive VP & CTO*

Yes. Fantastic. Thanks, Eric. So we're excited by DSS. We've been working on it for a long time. Like you said, we recently launched it. We're covering over 200 million pops at this point. And we'll be turning on more in the coming months to get more coverage.

Frankly, we're seeing the speeds, the performance that we expected. We've been spending a lot of time on this with our vendor partners with Ericsson, Nokia, Samsung as well as Qualcomm, and our OEMs like Apple. So we've been spending a lot of time on it, and it's working well.

And one thing that I would like to say about it, I think there's -- DSS is a tool in our tool chest, as we say, on our journey to efficiently move folks from 4G to the new 5G technology, which is where we were talking earlier about where all the R&D money is going. So this is a step along an evolution that we are taking. So at some point in the future, all of our spectrum is 5G capable. We'll be running on a stand-alone 5G core. And we'll be -- have all the greatest features that were thought about in Release 15 and Release 16.

So it's working really well. It's a great way to transition people to the new technology. And we'll still be optimizing and working on it as it is new, but it is absolutely meeting our targeted engineering requirements at the moment.

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

Okay. Great. And obviously, your 5G ultra wideband has been another topic of interest for investors. You mentioned at a recent Analyst Day, you're seeing some big impressive speeds. I think north of 4 gigabits per second. Obviously, I think geographic coverage is one thing that some people may have concerns about and that it's relatively limited right now. So maybe you can talk about the game plan to improve the coverage, whether that includes adding additional cell sites, adding additional fiber. And how long do you think it can take where that becomes more than something that's more hotspot related in some kind of key urban markets.

Kyle Malady - Verizon Communications Inc. - Executive VP & CTO

Yes. So first of all, right, it's no secret, millimeter wave does not propagate the same way that, say, low-band does. But that's all well known. So what we're doing is we are building aggressively in 2 ways.

First, we have a One Fiber program. So we are putting the fiber into these urban areas, and then we're adding our 5G nodes on it. I think in a conference like this a couple of years ago, I basically said, our 5G ultra wideband networks are really going to be a fiber network with antennas hanging off of it. And that still holds true. And so we continue to deploy the fiber. And we're deploying thousands of small cells, even in the COVID environment. And so that's the first way in which we are able to grow our footprint. And that's -- we're aggressively deploying that now.

The other way is by technology. So this is early -- we're early in the technology cycle with 5G and with millimeter wave. And every single day, we learn more and more about it. We work with our partners in the ecosystem to continue to come up with new ways and new techniques that will allow this to propagate farther.

I think I've been asked questions a lot about how far does it go. It's highly dependent on the environment that you're engineering it in. But the technology side, there's been some announcements recently with, I think, Qualcomm, Ericsson and a couple of other carriers where they're able to propagate and decode the signal up to like 5 kilometers. So the technology advancements are going to come. But in the meantime, we're going to continue to keep our heads down and build out aggressively.

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

Okay. Great to hear. And obviously, as you mentioned, one key part of this is your One Fiber program. And I think you've said in the past that something like 90% of the new small cells you're hanging are on your own fiber.

So you've been a very aggressive fiber builder. I think at one point, I know it's not linear, but you're building north of 1,500 route miles of fiber per month. So kind of where are you in the overall fiber build plan? I know you're in kind of 60-plus cities right now. How much longer do you have to build out kind of the network core? And then at some point, will this kind of fiber transition turn to more success-based? And then kind of related to that, are there also other geographic areas where it may make sense to build fiber beyond those cities you're in already.

Kyle Malady - Verizon Communications Inc. - Executive VP & CTO

Yes, great. Thanks for that. So we're basically right on plan with our fiber build, even with the COVID. Even with -- we run into some headwinds in certain municipalities trying to get permits and whatnot. But I was just looking last night, and we're basically 20 miles better than our goal so far this year in terms of laying fiber.

We're still putting thousands of miles on per month. It's a little bit less than we were doing last year. Last year, we were putting a lot of what we call the core runs so up the big streets. Now a lot of the build is more towards going up maybe what we call these laterals, so smaller streets, where we're putting the small cells. So we're meeting the small cell with the fiber build and doing really well there. The vast majority of our 5G sites are on the One Fiber asset right now.

Over time, we'll hit a sweet spot in a mix of what's on our own versus what we lease. We'll always be leasing some because each one -- we make the termination on One Fiber for each market we're in. And while we're starting with our 60, you asked the question about where are we. We're in good shape with all of the 60-plus we have going on right now. Probably 2 or 3 years away from completing those. But we'll be opportunistic as we move forward. And as we think about deploying more ultra wideband, think about what each market looks like, we'll do our calculations and our calculus, and decide is this something another market where we might want to do some -- have owner's economics, and we'll make those choices as we move forward. But for the initial one, we're really happy.

A vast majority of our 5G sites are going on the fiber. We're also starting to put 4G sites on that fiber. And then as we move forward, we've been putting some enterprise circuits on it. So we can move off of paying leases and rents on some fiber and some connectivity. And we could move it on and enjoy the owner's economics that we have from this. So it's full steam ahead with the One Fiber.

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

Great. And I guess related to that, and you kind of alluded to this in your last response. But obviously -- do you really have a preference between kind of owning fiber or leasing it. Is it really just kind of come down to economics. You've kind of obviously built in a lot of cities, but you also acquired an asset WideOpenWest in the kind of Chicago metro area a few years back.

So just kind of wondering how you look at kind of M&A versus greenfield building. And are there other M&A opportunities out there or other kind of wireline players you could potentially partner with to help you accelerate the build?

Kyle Malady - Verizon Communications Inc. - Executive VP & CTO

Yes. So there's a -- first of all, it comes down to -- our brand promise is having the best network. So if I can own, and run, and operate, and engineer and design the full end-to-end network, for us, that's a big deal. And we like to have that. But it all does come down to economics. And so while I enjoy designing and building these things, and running it and maintaining them, it has to be profitable. So that's the work we do to make sure we're going to get the return on investment we do here.

And you bring up that acquisition. We're always looking -- that one was a fairly large one, and it came with fiber. And so that got some press. But we've done a lot of other little tuck-in things here and there where I've bought assets, and it might not even be fiber. It might just be the conduit. So if I can get conduit, and I can buy conduit and that speeds it up, that actually helps me with my return on the investment. And maybe we go do a tuck-in like that, and then that helps expedite getting the fiber in the ground. And then ultimately, more dense millimeter wave cell sites out there.

So what I would say is it's -- we're going to continue to look at it. We're going to -- we're excited by it. And -- but it will come case-by-case as we move going forward.

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

Great. So related to that, at the Investor Day last month, you talked about -- and you mentioned this earlier, you're adding thousands of new cell sites every month to support the ultra wideband network. And I think you also said that the vast majority are on your own fiber.

So how do you think about the small cell build. Do you largely self-perform them yourself? Do you use a third-party provider like a Crown Castle? How does that equation go into your calculus of how quickly you can turn out those small cell sites.

Kyle Malady - Verizon Communications Inc. - Executive VP & CTO

Yes. So it's -- that's an interesting question. We've done -- we've pivoted a lot more to doing more self-perform and for a few reasons. And we do it not only in building the RAN but also in our core. We fundamentally believe if you build -- you design it, you build it, you understand it better. You can characterize what you're trying to do at a very fundamental level. And I think it ends up being a better product at the end of the day. All of our engineers understand how it works. They understand if there's something wrong, why it's wrong. They don't have to rely on somebody else. So we prefer the self-perform.

But if you want to scale at the rate we want to scale at, you also need to bring in other help. And so that's why we are definitely working with the Crown Castles, the ExteNets, the Zayos and others in markets where we're not doing it ourselves so we can accelerate what we're trying to do.

So each -- like I said, each region, we make the determination. All of my engineers, we are at the local level. We fundamentally believe that you can't run and design a great network from the center of somewhere. We need to have feet on the ground, and we work with those folks to make sure we have great processes, great tools, great systems. And then we make a determination on how we're going to attack that particular market.

And the other thing I would say is just because we start maybe with a -- maybe a third party helping us in a particular market. 5 years from now, we may take another tact and do something different. So -- but right now, it's about getting as much network out there as we can at the best cost as we can. So...

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

Great, great. So I wanted to go back, you talked a little bit about millimeter wave spectrum. So obviously, we know the speeds are impressive, but you had mentioned some of the more limited propagation. But I was curious about some of the technology advances that allowed the propagation to really improve.

I think a few years ago, with your 5G Home product, I think you said you could achieve gigabit speeds from as far as 3,000 feet away. It sounds like maybe with some of the new technology advances, you can even go further than that. So how do you see that evolving. Does this open up maybe a wider addressable market with the new technology where you can even broaden the number of homes you cover with 5G Home?

Kyle Malady - Verizon Communications Inc. - Executive VP & CTO

Yes. So what -- there's 2 things. There's how far it carries, but like I said, it's very local. And it depends on the topology of the area you're trying to cover. Is it kind of a suburban place? Or is it the middle of Manhattan with 60-story skyscrapers, right? And so each one needs to be engineered a little differently.

Now for mobility, the farther it carries, that's fantastic. For fixed wireless access, if it carries farther, that means you got better power, and that means you got a better chance of getting indoor penetration, which is really something that we're looking for on the fixed wireless access side. So coming up with ways to penetrate like low-e glass and brick better than we currently do today will only help our addressable market.

Now it takes 2 to tango, though, right? We have our network that we're building out. The more cell sites we build, the more density we get, the better we'll be able to penetrate buildings. But the better our CPE gets in the home, and the better we have other solutions like we have Pivotal and a couple of other things that help gain in-building coverage, those will help as well. And all of these things will just help address getting the signal into a building with fixed -- with a millimeter wave so people can enjoy our 5G Home on millimeter wave.

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

Great. I'm curious, too, related to that, the kind of the in-building opportunity with 5G, how you see that today. I'm sure some of it has been impacted by the pandemic. People aren't gathering in large stadiums or large concert venues. But I guess, on the other hand, nobody is in them. You can

probably actually do a lot of work in engineering in those facilities. So has the pandemic shifted your thinking at all in terms of the in-building opportunity with 5G? Or is it more or less the same? And do you think next year, particularly with, hopefully, a vaccine and somewhat of a resumption of the return to normal that you could see opportunities really rise to a greater extent.

Kyle Malady - Verizon Communications Inc. - Executive VP & CTO

Yes. I think we're like every other business, and we're thinking about these things, too. We don't think business goes back to exactly the same way it was before. But we do believe people return back to urban centers. People will return to stadiums. People will return to concert venues. So we continue to build in all those areas.

And what's interesting is -- then there's other -- as we think through the pandemic, other opportunities for us. So we've launched, and we've been showing an application with the NFL on your device where you can see a bunch of different camera angles from your phone. So just instead of watching the one-camera angle from your linear TV, you can have the companion device, and you can see all manner of different things. And now those are interesting use cases that we can bring to bear using 5G. But we fully believe over time here, people will come back.

Now the ways of working will be different, right, because a lot of people have been struggling in figuring out how do they keep their supply chains going. How do they keep their manufacturing going, maybe with not having so many people there. We think there's a great opportunity for 5G in-building, particularly paired with millimeter wave and with mobile edge compute, to maybe help industries move forward with more automation in their manufacturing facilities. And we think there's going to be a great opportunity there. That will drive a lot of, I think, value creation and cost savings for a lot of enterprises out there. And now people are thinking about it.

There's -- we travel a lot. I talked to a lot of CIOs, a lot of CEOs, this is on top of mind for everybody. And a lot of people are thinking about how can I use this new 5G platform along with mobile edge compute to really change the way I do work.

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

Sure. Sure. That's helpful color. So I wanted to shift something you mentioned at the Analyst Day last month. I think everyone kind of focuses on 5G as a revenue opportunity for all the carriers, but there's a real cost component as well in terms of lowering the cost per gigabit -- or cost per gigabyte. So as you add more coverage, you add more subscribers under your 5G network, which I know will be an evolution. What kind of cost efficiencies can you see from larger channel sizes, more network energy efficiency. Is that something that maybe investors are missing? Is that -- there's a real cost benefit once you scale up this network as well.

Kyle Malady - Verizon Communications Inc. - Executive VP & CTO

Well, yes, I think that's a great question, Eric. And actually, I think the revenue and the cost kind of go hand-in-hand, to be honest with you. So the cost per bit is a huge reason for us to move into 5G and millimeter wave. And it's almost a P times Q exercise, right?

Traditionally, carriers are constrained with -- we didn't have the spectrum depth. So for instance, a fixed wireless play was basically impossible because you had to keep your spectrum really for the mobility use case. However, the game is changing now and due to the amount of spectrum we have, and the cost per bit we can achieve, it opens up new greenfield revenue opportunities for us. So really, they kind of go -- they go hand-in-hand.

And for -- I've been doing this for a long time. I always wanted to do a fixed wireless access play. Now because we have the depth in millimeter wave, and we are making this work and growing it. I've got a great view to a good new business there.

But also, we are deploying -- we're starting to do fixed wireless access in our LTE spectrum. And the reason we're doing that is because now I see a path for ability to grow our capacity and start working with fixed wireless access in bands that we typically would not.

So -- but it really all comes down honestly to the economics. And like I said, so much bandwidth, I can -- I virtualize my networks. I can come with a fraction of the cost per bit as per 4G -- as compared to 4G, and it really opens up these new things for us.

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

Okay. That's helpful. I guess related to that, kind of on the 5G use case question that we get a lot. What is your sense and how it evolves? Do you think the earliest adopters will be more potentially enterprise customers, so whether that's industrial, manufacturing, various types of IoT or maybe public sector, more so than the consumer, at least initially? And how do you think that kind of evolves over time in terms of new use cases you see on the kind of near-term horizon?

Kyle Malady - Verizon Communications Inc. - Executive VP & CTO

Interesting question. So I'll go back to like when we were moving from 3G to 4G, I was prognosticating what I thought the killer apps would be, and I was like, absolutely wrong. So I'm not going to do that again with 5G. I think what we're trying to do is we build a platform with these great capabilities. And then people will figure out how to utilize them for -- to benefit either their application, their firm.

The ones that are most interesting to me at the moment are more of the industrial applications, though, because I see in that world, in that segment, people can bring -- CIOs and people who run factories, et cetera, are always looking for new and better ways to do it. And I can see a bunch of different technologies coming together with compute being right at the edge, right there, really being able to bolster what you want to do locally. The great capabilities that 5G brings in terms of latency, bandwidth, ultra reliability. And when we get Release 16, that will be even more. And then bring in AI and other things. So you can see these folks thinking really about how do I bring all these technologies together to really give me a competitive advantage. So I see a lot of effort there.

But then I see in the consumer play, a lot of B2B2C stuff in gaming, AR/VR, and I think different devices, if you will, right? So I see innovation and I see thinking happening like all across the landscape on how people can use these platforms to do something different in the future. So it's kind of across the board at the moment.

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

Great. No, that's good to hear. So I'm interested -- obviously I know you can't talk about C-band, but you did acquire some CBRS spectrum recently. And I think you've mentioned that, that's kind of helped you add some additional 4G carriers to help deal with some kind of control plan and efficiencies of DSS. So maybe you could provide a little more color on what you're doing with the CBRS spectrum. And we've often thought that it had more indoor applications than outdoor, but does it also have some interesting outdoor use cases as well for that spectrum?

Kyle Malady - Verizon Communications Inc. - Executive VP & CTO

Absolutely. Absolutely. So we're very happy. We were able to get some good spectrum in the last auction there, and it is a mix. I think a lot of folks thought it's just for indoor. We've deployed it mostly -- we've deployed it already, and it's mostly outdoor in a few thousand nodes. So -- but we don't -- it's going to be good, once again, for more urban areas, places where you might have some capacity constraint. It's easy to add it in. A lot of devices already support it. So for us, it's an easy way to add some capacity to places that we need to. So you'll see it mostly on small cells as we deploy it. But you'll also see it in macros in places that are more densely populated.

And then obviously, it is -- more spectrum we can use. You talked about stadiums and arenas, live venues, in-building for enterprise. So it's certainly spectrum that is perfect for use there as well. So we see it as multipurpose spectrum. Just to add to the portfolio to help us in areas that we might have some capacity constraints.

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

Great. That's helpful. So I know, obviously, you mentioned earlier the new CPE that was being rolled out for 5G Home. So maybe you could kind of help provide a little color on some of the improvements in the new CPE, and to what extent that will really help you kind of broaden the geographic reach of that. I know you put out a longer-term target of maybe reaching 25 million to 30 million homes. How critical is this new CPE in kind of helping you bring this product to more people.

Kyle Malady - Verizon Communications Inc. - Executive VP & CTO

Yes. So we've -- if you remember, we started -- I mean, I guess, let's start -- we have like 3 key areas that we're thinking about here. First of all, it's like constant performance improvement. So like I discussed before about getting a little more higher power, better receiver sensitivities, the like, so we can -- so customers can get the service.

We try and get material cost reductions. So we're trying to drive down the price significantly over these generations. And we're basically maniacally focused on self setup because we think that's one of the key things, a differentiator for us in this space could be -- it's a similar model to buying a cell phone. You go online. You purchase the CPE. It shows up in the mail the next day. And in 40 minutes, you're able to spin it up and get gigabit service in your house.

So if you remember, we started with the gen 1 solution, it was TF, that was our own 5G spec. They were kind of very expensive because it wasn't for mass deployment anywhere. And that had our TF. It had our LTE and WiFi 5. And basically, it needed to be a professional install.

Then we went to gen 2, it was NR. Also with LTE and WiFi 6 with a router in it. And that allowed people to begin to self setup. And we learned a lot from that.

Next, we plowed into the latest gen 3 which is a high-power NR along with LTE, and WiFi 6 and AP all in one. And we have a much higher uptake in self setup because what we learned in gen 2, a lot -- a vast majority of folks are able to set it up within 40 minutes by themselves. And we're upwards of about -- close to 70% could do it on their own.

Now that's -- our goal is to get probably closer to 80%. So we're going to continue to work on that. We're working on our next-gen 4 design right now, which we expect will continue to increase the performance, new chipsets, reduction in cost again and also a little more help with the self setup and -- to achieve our overall 80% success rate with self setup. So we continue to work that piece of it. Like I said, it takes the network and the CPE to dance together. And so we focus on both sides.

Eric Luebchow - Wells Fargo Securities, LLC, Research Division - Associate Analyst Okay, great.

Look forward to hopefully being able to get it in my Chicago neighborhood soon. So...

Kyle Malady - Verizon Communications Inc. - Executive VP & CTO

Okay.

Eric Luebchow - Wells Fargo Securities, LLC, Research Division - Associate Analyst I'll talk to

Brady about that.

Kyle Malady - Verizon Communications Inc. - Executive VP & CTO

There you go. He's the right guy.

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

So the final topic I want to talk about was mobile edge compute. It's something that you've brought up as a growth adjacency for 5G. You've talked about having 10 MEC centers up next year, or multi-access edge compute, I suppose, is the correct terminology.

So maybe you could just give us an overview of what kind of use cases you're seeing and its initial adoption in these MEC centers. And where you're seeing more of this compute move closer to the edge, what kind of applications it's supporting.

Kyle Malady - Verizon Communications Inc. - Executive VP & CTO

Yes. So we're excited. We actually launched our -- it was -- we're going to do 10 this year. So we actually launched our eighth today in Las Vegas, along with AWS. They're doing the re:Invent conference right now. So we launched -- we have 8 down. We are putting 2 more in.

In terms of use cases, I see a lot of different -- it almost goes back to the point before. I see a lot of different proof of concepts going on right now. I'm seeing a ton of value like in computer vision type applications that require real-time decision-making. And very interesting in a COVID world where are people spacing? Do people have masks on? Do people have temperatures? These kind of capabilities can really be accentuated by using a 5G wireless network because it gives you more flexibility.

I see a ton of value. And people starting to think about that, like I talked about smart factory, autonomous industrial kind of things. We're working with a customer down in -- they build ships, 5G all over their campus. And they're able to just change the logistics of how the whole thing works and save some time, and effort and rework. And we have announced some proof-of-concept with GM, and Honeywell and some others. So we see a lot of traction in this space.

And then gamers. The gaming community on the consumer side is really interested in it -- because 5G along with MEC can really give you an experience that you couldn't get in a wireless network before in terms of the throughput and the ability to really render a high CPU-intensive game to a device that's wireless.

So we see it all across the place. We're doing a lot with sports. We announced something with the Suns. We're doing some interesting work with them on how they can use 5G and MEC to help improve performance of their players.

So like I said, I'd never want to prognosticate on what the killer apps are going to be. We're making a new application and a new platform with a ton of capabilities. And smart people out there are going to figure out ways to utilize it and -- for their own applications and their own use. So early days, but we're really excited by the buzz we're getting and the people's energy to utilize the platform.

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

Okay. Great. I think we're about out of time. So Kyle, I really appreciate you taking the time to speak to us today. And hopefully, next year, we can do this in person.

Kyle Malady - Verizon Communications Inc. - Executive VP & CTO

Yes. Absolutely.

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

So stay safe and healthy. We look forward to continuing to watch the 5G evolution at Verizon.

Brady Connor - Verizon Communications Inc. - SVP of IR

Yes. And Eric and Kyle, this is Brady. I just need to -- as the IR guy, I failed my responsibility. I need to get in here at the end and just mention the safe harbor statement.

So everything that Kyle just went through falls under the parameters of the safe harbor statement on our website that has forward-looking statements that contain risks and uncertainties. So thanks a lot, guys. Sorry, Kyle.

Kyle Malady - Verizon Communications Inc. - Executive VP & CTO

Thanks.

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

Thank you, both.

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.

©2020, Refinitiv. All Rights Reserved.